State of California – California Environmental Protection Agency
Department of Toxic Substances Control

CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY

The Department of Toxic Substances Control (DTSC) has completed the following document for this project in accordance with the California Environmental Quality Act (CEQA) [Pub. Resources Code, div. 13, § 21000 et seq] and accompanying Guidelines [Cal. Code Regs., tit. 14, § 15000 et seq].

PROJECT TITLE: Former Salinas Manufactured Gas Plant Remedial Action Plan		CALSTARS CODING: 200281
PROJECT ADDRESS: 2 and 4 Bridge Street	CITY: Salinas	COUNTY: Monterey
PROJECT SPONSOR: Pacific Gas and Electric Company (PG&E)	CONTACT: Mike Lee (MCLJ@pge.com)	PHONE: (510) 656-9029

APPROVAL ACTION UNDER CONSIDERATION BY DTSC:

☐ Initial Permit Issuance ☐ Permit Renewal ☐ Permit Modification ☐ Closure Plan
☐ Removal Action Workplan ☒ Remedial Action Plan ☐ Interim Removal ☐ Regulations
☐ Other (specify):

STATUTORY AUTHORITY:

☐ California H&SC, Chap. 6.5 ☒ California H&SC, Chap. 6.8 ☐ Other (specify):

DTSC PROGRAM/ ADDRESS: 700 Heinz Avenue Berkley, California 94710-2721	CONTACT: Mr. Sagar Bhatt	PHONE: (510) 540-3844

PROJECT DESCRIPTION:

The Department of Toxic Substances Control (DTSC) is proposing to approve a Remedial Action Plan (RAP) for the Former Salinas Manufactured Gas Plant (MGP) Site (Site) pursuant to regulatory authority granted under Chapter 6.8, Division 20, sections 25323.1 and 25356.1, California Health and Safety Code (H&SC). The Draft RAP addresses impacts to soil and groundwater from previous operations at the Site. The soil at the Site is impacted by benzene, ethylbenzene, polycyclic aromatic hydrocarbons (PAHs), antimony, arsenic, cadmium, lead, mercury, and petroleum hydrocarbons including visible oil and coal tar residues. The RAP proposes Remedial Alternative 3, which involves:

(1) Treatment of deep impacted soil extending to ground water (up to 35 feet) using in situ stabilization (ISS) to bind soil residues in a Portland cement and water mixture. ISS treatment will include large diameter auger drilling to mix the binding agents (Portland cement and water) into the subsurface to treat approximately 14,361 cubic yards (CY) of impacted soil.

(2) Off-site disposal to a permitted disposal facility of 4,308 CY of excess soil ("swell") generated during ISS treatment, or approximately 294 truckloads.

(3) Import of Portland cement into the Site in approximately 90 truckloads for use during ISS treatment.

(4) Confirmation soil samples will be collected from the subsurface following ISS treatment.

(5) The Site will be capped with pavement, concrete, and/or crushed rock at the end of the project.

(6) Institutional controls in the form of a land use covenant (LUC) will be placed on all parcels within the Site to prohibit groundwater use and other sensitive uses (e.g., single family residences, schools, day care centers)

because residual impacts will continue to exist in the subsurface above levels acceptable for unrestricted use of the property.

(7) A network of groundwater monitoring wells will be installed via drilling, and monitored (sampled) for a minimum period of three years following completion of remediation.

(8) Additionally, a series of soil gas wells will be installed via drilling and sampled 6 months following completion of the remedy.

Background

The former MGP site is located at 2 and 4 Bridge Street in Salinas, California (Attachment B - Figure 1). The Site is bounded by a commercial property to the north (Universal Auto), Bridge Street to the west, railroad tracks owned by Union Pacific Railroad to the south, and a City-owned alley (Bridge Alley) and commercial properties to the east (Attachment B – Figure 2). The Site, which occupies approximately one (1) acre, consists of five (5) parcels (properties) identified by Assessor Parcel Numbers (APN) 002-194-024 (Chevron), 002-194-027 (PG&E, formerly Alvarez), 002-194-028 (PG&E, formerly California Water Service Company [CWS]), 002-194-023 (PG&E regulator station), and a portion of Market Way, located at the south end of the Site between Bridge Street and Bridge Alley (Attachment B - Figure 2). The Site is mainly vacant, except for an active PG&E gas regulator station near the southeast corner of the Site (Attachment B – Figure 2). The building shown in the southwest corner of the Site on Figure 3 in Attachment B was removed in 2013. The northern section of the Site (APN-002-194-024) is vacant, partially paved, and was the former site of a petroleum products bulk plant operated by Union Oil Company of California (Unocal) from 1963 to 1991 (now owned by Chevron; Attachment B – Figures 2 and 3). APN-002-194-027 in the southern part of the Site is vacant, paved, and was purchased by PG&E in December 2012 from Mr. Dimas Alvarez (Attachment B – Figures 2). The southeastern corner of the Site was purchased by PG&E in December 2018 (APN-002-194-028) and is vacant and partially paved. APN002-194-023 is also owned by PG&E and is currently used as an active unmanned gas regulator station (Attachment B – Figures 2). The PG&E regulator station borders Bridge Alley to the east and is enclosed by a concrete block wall and chain-link fence measuring approximately 40 feet long by 23 feet wide.

The topography of the Site is generally flat. Storm water runoff discharges to underground storm drains along Bridge Alley and Bridge Street located to the east and west of the Site, respectively. The surrounding land use is primarily commercial. The areas north and east of the Site are zoned for mixed use. Across Bridge Alley, on the east side of the Site, there is an apartment building and several commercial businesses. Universal Auto Repair occupies the property north of the Site, and several apartment buildings are located across East Lake Street approximately 250 feet north of the Site and Universal Auto (Attachment B- Figure 2). The Site and the areas west and south of the Site are located within a mixed arterial frontage (MAF) district. The MAF district land-use designation provides a combination of mixed use, commercial and small-scale non-nuisance industry. Commercial retail and mixed-use zones are located south of the Site and the railroad tracks, and west of the Site across Bridge Street.

The former manufactured gas plant was constructed in 1873 and initially used coal as its feedstock. In 1901, the plant was replaced with an oil-gas facility that operated until 1929 when natural gas became available. The plant remained on standby status until the plant was finally decommissioned in 1934. The former MGP layout is shown in Attachment B- Figure 3. In 1938, the main gas works building, and associated structures were removed from the Site. The Site was used as a gas storage facility until the early 1960s when the property was subdivided and sold to Unocal and CWS, except for Parcel 23 which PG&E retained as a gas regulator station, which is still in operation. PG&E purchased Parcel 28 from CWS in December 2018.

Environmental assessment of the Site has been conducted since 1986. The Remedial Investigation (RI) was conducted from 2011 to 2013 using a tiered approach to evaluate impacts to soil, soil gas, and groundwater beneath the Site. The pre-feasibility study (FS) investigation was conducted in 2015 to obtain additional data to support the Human Health Risk Assessment (HHRA) and cleanup remedy selection/design/planning, evaluate seasonal variation of soil gas conditions, and to investigate buried MGP structures encountered during the RI. These assessments revealed subsurface soils impacts in the upper ten (10) feet consisting of volatile organic compounds (VOCs; mainly benzene and ethylbenzene), polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons, and metals. Groundwater impacts include benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tertiary butyl ether (MTBE), PAHs, petroleum hydrocarbons, mainly gasoline and diesel-range petroleum hydrocarbons (TPHg and TPHd, respectively), and arsenic.

Selection of a Site Remedy

To achieve the remedial action goals (RAGs) for the Site, consideration was given to remedial actions that could: 1) protect human health and the environment by limiting exposures to chemicals of concern (COCs) through inhalation, dermal contact, and ingestion, 2) cleanup soil to meet future mixed-use development with minimized restrictions, 3) ensure concentrations of COCs remaining in soil are protective of human health and the environment to the extent practicable, 4) cleanup to background levels, 5) cleanup to levels attainable through application of best practicable technology, 6) prevent the ingestion of groundwater by limiting its on-site use, and 7) meet or exceed all applicable or relevant and appropriate requirements. A range of remedial measures were considered and evaluated for soil impacts including engineering controls, institutional controls, excavation of shallow (<10 ft) and/or targeted deep (>10 ft) soil "hot" spots, in-situ treatment by vapor extraction and solidification-stabilization, and containment. For groundwater, remedial options evaluated included bioremediations treatment, extraction and treatment, and institutional controls. The following list of remedial alternatives were evaluated for the Site:

- Alternative 1: No action.
- Alternative 2: Containment with institutional controls and long-term groundwater monitoring.
- Alternative 3: In situ soil stabilization (ISS) of deep soil impacts, containment (capping), institutional controls, and short-term groundwater monitoring.
- Alternative 4: Excavation of the top 5 feet of soil, targeted soil excavation to 10 feet below grade, ISS of deep soil impacts below 10 feet, institutional controls, and short-term groundwater monitoring.
- Alternative 5: Excavation of shallow and deep soil impacts with containment, institutional controls and short-term groundwater monitoring.

A comparative analysis of the five remedial alternatives resulted in the selection of Alternative 3. The selected remedy (Alternative 3) includes targeted treatment of deep impacted soils using ISS. ISS treatment is used to solidify and stabilize soils containing the highest concentrations of COPCs, or those that have visible oil or coal tar residues extending to groundwater (up to 35 feet). ISS treatment is conducted by mixing binding agents consisting of Portland cement and water into the subsurface to bind COPCs. This mixing is done with an excavator bucket with mixing tool attachment, and/or a large diameter drill rig. ISS treatment will be applied to approximately 14,361 CY of in-place subsurface soil in the areas shown in Attachment B – Figure 4. As the binding agents are mixed into the subsurface for ISS treatment, excess soil "swell" at the surface will be unearthed (generated). This soil swell generated from the ISS operation will require loading into trucks, possible stockpiling, and ultimately off-site disposal at a permitted disposal facility. For the selected remedy (alternative 3), a soil swell volume of approximately 4,308 CY is estimated that will require off-haul to a permitted disposal facility. This soil will be hauled off-site in approximately 294 truckloads. Within the area of ISS treatment, confirmation soil sampling will be conducted using a drill rig to document post-remediation conditions. Soil gas confirmation sampling will also be conducted following completion of the remedy from newly installed soil gas wells. The Site surface will be restored to its existing grade and drainage patterns. The Site will be capped with asphalt pavement, concrete, and/or crushed rock at the end of the project. The final cap construction material will be determined during the remedial design phase. Crushed rock, if used, would be underlain by geofabric and the surface will be restored to existing grade so there will be no significant impact to hydrology. Institutional controls in the form of a land use covenant (LUC) will be placed on all parcels within the Site to prohibit groundwater use and other sensitive uses (e.g., single family residences, schools, day care centers) because residual impacts will continue to exist in the subsurface above levels acceptable for unrestricted use of the property. A network of groundwater monitoring wells will be installed and sampled for a minimum period of three years following completion of remediation.

Project Activities

The RAP proposes the following remedial actions to address the COCs in soil and groundwater at the Site:

- Decommission existing groundwater wells and soil vapor wells, and demolition of former building foundations, and existing pavement.
- Targeted treatment using ISS of 14,361 CY of deep soil impacts that extend to groundwater (up to 35 feet bgs) combined with off-site disposal of approximately 4,308 CY of impacted soil that will be displaced

from the subsurface during mixing of the ISS binding agents (Portland cement and water mixture) into the subsurface.
- Confirmation soil sampling.
- Grading to restore the Site to existing grades and drainage patterns.
- Installation of a finished surface cap consisting of pavement, concrete, and/or crushed rock throughout the Site.
- Installation of new post-remediation soil vapor and groundwater monitoring wells for post-remediation monitoring.
- Confirmation soil gas sampling.
- Post remediation groundwater monitoring for a minimum of three years.
- Land use covenant (LUC) to restrict future activities at the Site, sensitive land uses, groundwater use, and layout a framework for the handling of soils if they are unearthed during future site activities.

Project Schedule

The proposed remedial actions are scheduled to begin in summer 2019 and be completed in winter 2020.

Attachments to this Initial Study include:

Attachment A
- Reference List

Attachment B
- Figure 1 – Site Location Map
- Figure 2 – Aerial View of Site and Surrounding area
- Figure 3 – Site Plan showing the Former Salinas Manufactured Gas Plant
- Figure 4 – Proposed Remediation Plan

Attachment C
- Cultural Resources Report for Site

Attachment D
- Federal and State Ambient Air Quality Standards
- Project Emissions Estimation Output Reports from CalEEMod version 2016 for Summer, Winter, and Annual Emission Rates
- Greenhouse Gas Emission Estimation

ENVIRONMENTAL IMPACT ANALYSIS:

1. Aesthetics

Project Activities Likely to Create an Impact:

NONE. The Site is currently a vacant and unoccupied commercial lot, except for an unmanned PG&E regulator station, and is partially paved with no existing landscaping or trees (Attachment B- Figure 2). City-owned paved streets and an alley way immediately surround all sides of the Site, followed by mixed uses including residential apartment buildings, and commercial businesses (Attachment B- Figure 2). Project activities will include construction activities to install binding agents including a mixture of Portland cement and water into the subsurface using standard earthwork equipment (excavator) and/or a large diameter drill rig, with trucking of excess soil swells off-site, and trucking of Portland cement into the Site. The Site will be restored to existing grades and drainage, and capped with pavement, concrete, and or gravel at the end of the project, thereby restoring the Site to match existing conditions. Project activities will not change the existing aesthetics on-site or in the Site vicinity, and therefore no further analysis to this resource category is necessary.

Description of Baseline Environmental Conditions: The Site is a vacant unoccupied partially paved commercial lot, with the exception of a PG&E regulator station, and does not contain any landscaped areas or trees. The east side of the Site is bound by Bridge Alley followed by an apartment building and several commercial businesses; Universal Auto Repair borders the Site to the north followed by East Lake Street and several apartment buildings; Bridge Street borders the Site

to the west followed by an auto body shop; and, Market Way borders the Site to the south followed by the Union Pacific Railroad. Therefore, the Site and vicinity do not exhibit any existing aesthetic resources. The areas north and east of the Site are zoned for mixed use, while the Site and the area west and south of the Site are located within a mixed arterial frontage (MAF) district. The MAF district land-use designation provides a combination of mixed use, commercial and small-scale non-nuisance industry. The Site will be restored to pre-remediation grade after remediation is complete and the surface finished with pavement, concrete, and/or crushed rock, similar to the existing condition. Therefore, no impacts to aesthetics would occur, and no further analysis of impacts to this resource category is deemed necessary.

Analysis as to whether or not project activities would:

a. Have a substantial adverse effect on a scenic vista.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

c. Substantially degrade the existing visual character or quality of the site and its surroundings.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

References Used:

1. Salinas Community Development, 2010, Official zoning map, city of Salinas: Downloaded from http://www.cityofsalinas.org/services/commdev/current_planning.cfm on June 23, 2016.
2. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.

2. Agricultural Resources

Project Activities Likely to Create an Impact:

NONE. The proposed project is not located in or near any agricultural resources. The Site is located in a developed area of the City of Salinas zoned MAF for Mixed Arterial Frontage. The Site is partially paved, while the immediate vicinity consists of paved City streets and an alleyway. The Site surroundings beyond the paved streets and alleyway include properties occupied with mixed-use, residential apartment dwellings, and commercial businesses. There are no existing agricultural resources onsite or within the Site vicinity. Further, there are no designated farmland security properties or Williamson act parcels within the City of Salinas limits. The proposed project includes construction activities to mix binding materials into the subsurface, trucking to haul soil swell off-site, and trucking to haul binding materials into the Site. The Site will be graded to existing grades and drainage patterns, and capped with pavement, concrete, or crushed rock at the end of construction to restore the property to match existing conditions. Therefore, no impacts to agricultural resources would occur from the proposed project activities. For these reasons, no further analysis to this resource category is deemed necessary.

Description of Baseline Environmental Conditions: The Site is a vacant unoccupied partially paved commercial lot, with the exception of a PG&E regulator station, and does not contain any landscaped areas, trees, or agricultural resources (Attachment B- Figure 2). The immediate vicinity of the Site includes paved streets and an alleyway, followed by mixed-use residential and commercial businesses. Therefore, the Site and vicinity do not exhibit any existing agricultural resources. The areas north and east of the Site are zoned for mixed use, while the Site and the areas west and south of the Site are located within a mixed arterial frontage (MAF) district. The MAF district land-use designation provides a combination of mixed use, commercial and small-scale non-nuisance industry. Therefore, no impacts to agricultural resources would occur, so no further analysis of impacts to this resource category is deemed necessary.

Analysis as to whether or not project activities would:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

b. Conflict with existing zoning or agriculture use, or Williamson Act contract.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

References Used:

1. Salinas Community Development, 2010, Official zoning map, city of Salinas: Downloaded from http://www.cityofsalinas.org/services/commdev/current_planning.cfm on June 23, 2016.
2. Monterey County Resource Management Agency, Figure #AWCP4, Williamson Act Lands, October 20, 2010 accessed on February 5, 2018 at: http://www.co.monterey.ca.us/planning/gpu/GPU_2007/2010_Mo_Co_General_Plan_Adopted_102610/Figures_for_Agricultural_and_Winery_Corridor/FigAWCP4_Wllmsn_Act_Lands.pdf
3. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.

3. Air Quality

Project Activities Likely to Create an Impact:

- Presence and operation of construction equipment.
- Generation of fugitive dust and particulates at the demolition area, ISS work zone, decontamination areas, general work areas, stockpile areas, truck loading areas, truck staging/parking areas, and truck haul routes.
- Demolition of existing pavement and building foundations, and loading demolition debris onto dump trucks using construction equipment. Possible stockpiling of impacted soil swell using construction equipment.
- Loading impacted soil swell onto dump trucks using construction equipment.
- Transportation of impacted soil swell and demolition debris to appropriate off-site permitted disposal facilities.
- Transportation of ISS materials (Portland cement powder) into the Site.
- Grading and preparation of the ISS treatment area surface for finished surface materials (i.e. compaction and grading prior to paving to achieve rough grades that match existing elevations and drainage patterns)
- Operation of a drill rig to remove existing groundwater and soil vapor wells, collect confirmation soil samples, and install post-remediation groundwater and soil vapor monitoring wells.
- Restoring the Site surface to pre-remediation conditions using construction equipment.
- Use of vehicles to bring project personnel and supplies to the Site during construction.
- Operation of a cement batch plant to mix ISS binding agents (water and cement) and use of a drill rig and/or excavator with mixing tool attachment to place and mix these materials into subsurface soil.

Project construction activities will involve the use of various types of heavy equipment. Pollutants would be emitted from the fossil fuels used to power the heavy equipment. Excavators and other earth moving equipment will be required to demolish existing pavement and former building foundations, remove former subsurface concrete structures/remnants, place ISS materials into the subsurface, stockpile and/or load the impacted material onto trucks. Drill rigs will be required to remove existing groundwater and soil vapor wells, place ISS materials into the subsurface, collect confirmation soil samples, and install new groundwater and soil vapor wells at the end of the project. Trucks will be required to transport the material to off-site landfills and import ISS materials and finished surface materials from off-site. In addition, vehicles will be used to bring workers and supplies to the Site. The use of heavy equipment will be required to grade the Site to existing grades and drainage patterns, and pave the Site and/or place a crushed rock finished surface. A diesel-driven concrete batch plant will operate to mix the ISS materials prior to placement in the subsurface.

Description of Baseline Environmental Conditions:
The project Site is located within the North Central Coast Air Basin (NCCAB), which was formed in 1969 when the state of California designated the counties of Monterey, San Benito, and Santa Cruz as the North Central Coast Air Basin (NCCAB). The NCCAB is located along the central coast of California south of the San Francisco Bay Area, and east of the San Joaquin Valley Air Basin. The northwest sector of the basin is dominated by the Santa Cruz Mountains. The Diablo Range marks the northeastern boundary, and together with the southern extent of the Santa Cruz Mountains forms the Santa Clara Valley which extends into the northeastern tip of the Basin. Farther south, the Santa Clara Valley evolves into the San Benito Valley which trends northwest-southeast and has the Gabilan Range as its western boundary. To the west of the Gabilan Range is the Salinas Valley, which extends from Salinas at its northwestern end to King City at its southeastern end. The western side of the Salinas Valley is formed by the Sierra de Salinas, which also forms the eastern side of the smaller Carmel Valley. The coastal Santa Lucia Range defines the western side of the Carmel Valley.

The NCCAB covers approximately 5,159 square miles of the central coast of California, including Monterey, Santa Cruz and San Benito Counties. The main emission sources in the basin are from the Moss Landing power plant, a large cement plant located in Davenport, agricultural activities, and vehicle traffic on Highway 101. Two percent of California's population live in this basin, and therefore represent only two percent of vehicles driven in this area.

Regional meteorology in the basin is largely dominated by a persistent high-pressure area which commonly resides over the eastern Pacific Ocean. Mild temperatures are the standard throughout the year due to the moderating influence of the Pacific Ocean. In the summer, the high-pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The airflow is occasionally reversed in a weak offshore movement, and the relatively stationary air mass is held in place by the Pacific High-pressure cell, which allows pollutants to build up over a period of a few days. During the winter, the Pacific High migrates southward and has less influence on the air basin. Air frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially during night and morning hours. The general absence of deep, persistent inversions and the occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring. Because of the location of the City of Salinas combined with the area Metrologic conditions, in 2015 the city of Salinas was ranked sixth in the nation for clean air, and it has the cleanest air of any city in California.

The management of air quality in the NCCAB is the responsibility of the Monterey Bay Unified Air Pollution Control District (MBUAPCD), which was created in 1974 when the Monterey and Santa Cruz County Unified Air Pollution Control District merged with the San Benito County Air Pollution Control District. The MBUAPCD is the agency primarily responsible for ensuring that the federal national ambient air quality standards (NAAQS) and the state of California ambient air quality standards (CAAQS) are not exceeded, and that air quality conditions are maintained throughout the NCCAB. The federal and California state air quality standards are summarized in Attachment D. Any exceedance of a CAAQS (Attachment D) is considered a significant impact to air quality.

The main pollutants of concern in the NCCAB are particulate matter, ozone, and carbon monoxide. Particulate matter (PM) in diameters of 10 (PM10) and 2.5 (PM2.5) micrometers (inhalable and fine, respectively) is detrimental to health because it can get lodged in the lungs and is not filtered out by the respiratory system. Ozone is one of the main components of smog. Ozone is not directly emitted but is formed in the atmosphere over several hours from combinations of various chemical precursors in the presence of sunlight. The primary compounds, or precursors, contributing to the formation of ozone, are nitrogen oxides (NOx)), volatile organic compounds (VOCs), and reactive organic gases (ROG). Ozone is viewed as both a secondary pollutant and a regional pollutant. Ozone can cause problems to lung function, the respiratory system, and impairment of immune mechanisms. Carbon monoxide (CO) is emitted directly from combustion engines, and because of this carbon monoxide can have adverse localized impacts, primarily in areas of heavy traffic congestion. CO can reduce the oxygen carrying capacity of blood and can also affect the central nervous system at higher levels. In 2005, CO emissions from vehicles comprised 47% of total emissions in the NCCAB. Other pollutants of concern in the NCCAB are toxic air contaminants (TACs) and odors, mainly sulfur compounds and methane.

The NCCAB is currently designated as a nonattainment area for the State eight-hour ozone, but is in attainment with the state 1-hour ozone standard and the federal NAAQS for ozone. The NCCAB is also designated as a nonattainment area for State PM10, but is in attainment with the State PM2.5 CAAQS, and the federal NAAQS for both PM10 and PM2.5. CO, NO2, SO2, and lead are all in attainment with the Federal NAAQS and the State CAQSA summary of the current (as of January 2015) NCCAB attainment status is presented in the following table.

NORTH CENTRAL COAST AIR BASIN ATTAINMENT STATUS – JANUARY 2015

Pollutant	State Standards [1]	National Standards
Ozone (O_3)	**Nonattainment** [2]	Attainment/Unclassified [3]
Inhalable Particulates (PM_{10})	**Nonattainment**	Attainment
Fine Particulates ($PM_{2.5}$)	Attainment	Attainment/Unclassified [4]
Carbon Monoxide (CO)	Monterey Co. – Attainment San Benito Co. – Unclassified Santa Cruz Co. - Unclassified	Attainment/Unclassified
Nitrogen Dioxide (NO_2)	Attainment	Attainment/Unclassified [5]
Sulfur Dioxide (SO_2)	Attainment	Attainment [6]
Lead	Attainment	Attainment/Unclassified [7]

Notes:

1) State designations based on 2010 to 2012 air monitoring data.
2) Effective July 26, 2007, the ARB designated the NCCAB a nonattainment area for the State ozone standard, which was revised in 2006 to include an 8-hour standard of 0.070 ppm.
3) On March 12, 2008, EPA adopted a new 8-hour ozone standard of 0.075 ppm. In April 2012, EPA designated the NCCAB attainment/unclassified based on 2009-2011 data.
4) This includes the 2006 24-hour standard of 35 $\mu g/m^3$ and the 2012 annual standard of 12 $\mu g/m^3$.
5) In 2012, EPA designated the entire state as attainment/unclassified for the 2010 NO_2 standard.
6) In June 2011, the ARB recommended to EPA that the entire state be designated as attainment for the 2010 primary SO_2 standard. Final designations to be addressed in future EPA actions.
7) On October 15, 2008 EPA substantially strengthened the national ambient air quality standard for lead by lowering the level of the primary standard from 1.5 $\mu g/m^3$ to 0.15 $\mu g/m^3$. Final designations were made by EPA in November 2011.
8) Nonattainment designations are highlighted in **Bold**.

In the above table, the following definitions apply:

- Attainment – Air quality in the area meets the standard.
- Nonattainment – Air quality in the area fails to meet the applicable standard.
- Unclassified – Insufficient data to designate area or designations have yet to be made.
- Attainment/Unclassified - An EPA designation which, in terms of planning implications, is essentially the same as Attainment.

To maintain the air quality of the NCCAB, the MBUAPCD has established CEQA guidelines and thresholds of significance for criteria pollutants that are to be used by a lead agency to determine if there is substantial evidence that a project may create significant air quality impacts. Thresholds of significance for criteria pollutants are based on the offset requirements in Air District Rule 207 Review of New or Modified Sources. According to the Air District Guidelines for Implementing CEQA (last updated February 2016), the construction of a proposed project will not have a significant air quality impact on the environment, if the following thresholds presented in Table 1 are not exceeded:

Table 1
Construction Phase
Thresholds of Significance

Pollutant	Threshold of Significance*
PM10	82 lbs/day
PM2.5	55 lbs/day
NOx	137 lb/day
ROG (reactive organic gases)	137 lb/day
CO	550 lbs/day
Notes: *Includes emissions from all sources including exhaust and fugitive dust. **Source:** MBUAPCD Air District Guidelines for Implementing CEQA, dated February 2016, accessed at: http://mbard.org/wp-content/uploads/2016/03/Attachment_Guidelines-for-Implementing-CEQA.pdf	

MBUAPCD has also established thresholds of significance and criteria related to the operation of a proposed project in the Air District Guidelines for Implementing CEQA (last updated February 2016). These thresholds and criteria are summarized below in Table 2. The proposed project is entirely construction-phased base, and therefore the below operational thresholds are not applicable, but are presented herein for general background and completeness with regard to MBUAPCD regulations.

Table 2
Operation Phase
Thresholds of Significance and Criteria

Pollutant	Threshold of Significance*
PM10	82 lbs/day
PM2.5	55 lbs/day
NOX	137 lb/day
ROG (reactive organic gases)	137 lb/day
CO	550 lbs/day
Not cause or contribute to a violation of any California or National Ambient Air Quality Standard; Not result in a cumulatively considerable net increase of any criteria pollutant for with the project region is non-attainment; Not exceed the health risk public notification thresholds adopted by the Air District; Not create objectionable odors affecting a substantial number of people; and, Be consistent with the adopted federal and state Air Quality Plans.	
Notes: *Includes emissions from all sources including, mobile, area, and stationary. **Source:** MBUAPCD Air District Guidelines for Implementing CEQA, dated February 2016, accessed at: http://mbard.org/wp-content/uploads/2016/03/Attachment_Guidelines-for-Implementing-CEQA.pdf	

Analysis as to whether or not project activities would:

a. Conflict with or obstruct implementation of the applicable air quality plan.

Impact Analysis:
Project activities will not obstruct implementation of applicable air quality plans. Construction associated with the Project will result in emissions of carbon monoxide (CO), ozone precursors (nitrogen oxides [NOx] and reactive organic gas [ROG]), particulate matter (PM10 and PM2.5), air toxics, and greenhouse gases (see Section 7 of this checklist). However, the Project will be consistent with the control strategies contained in the 2005 Report on Attainment of the California Particulate Matter Standard - Senate Bill 656 Implementation Plan for attainment of PM10, and the 2008 Air Quality Management Plan and 2012 Final Triennial Plan Revision for attainment for ozone.

The Project has been designed to reduce air emissions during construction as much as possible. The Project will generate dust (PM10, PM2.5), CO, and ozone precursor (ROG, NOx) emissions arising from construction equipment, project traffic, and earthwork activities, but the impact will be less than significant when the following best management practices (BMPs) are implemented during the remedial activities:

- Construction activities will be phased to reduce the total area of exposed and disturbed soils at any one time;
- Soil-handling activities will be halted during periods of high winds (15 mph or greater);
- Airborne dust levels will be monitored during construction, activities along the perimeter of the Site. If monitoring data indicate that dust levels are above site-specific action levels established to ensure compliance with the MBUAPCD regulations, then engineering control measures will be implemented.
- On-site movement of vehicles and equipment will be limited to "crawl" speeds (i.e., 5 mph);
- On-site vehicles and equipment will be restricted to designated paved haul paths to the extent possible. Where a paved haul path is not possible, the unpaved access/haul roadway will be wetted or covered with gravel, soil amendment, or similar to minimize dust generation;
- All exposed surfaces (for example, staging areas, soil stockpiles, graded areas and unpaved access roads) will be watered periodically;
- Equipment idle time will be minimized to 5 minutes or less.
- The pace of loading and hauling of impacted soil will be limited to 30 truckloads per day;
- The duration of on-site soil stockpiles will be minimized, and all stockpiles will be covered during period of inactivity;
- All haul trucks transporting soil, sand, or other loose material off-site will be cleaned (hard brushed or washed) and covered;
- All visible mud or dirt tracked out onto adjacent public roads will be removed via street sweeping;

In addition, as shown below under item (3b), estimated worst-case maximum pollutant emissions from construction equipment, project traffic, and soil handling activities will be less than the established MBUAPCD significance thresholds presented in Table 1 (above). The recommended approach for determining project support of the goals of the current attainment plans for PM10 and ozone precursor emissions is to evaluate consistency with established thresholds of significance. Therefore, since project emissions would be less than the established thresholds of significance, the project would be consistent with the current attainment plans, and PM10 and ozone emissions impact would be less than significant.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Impact Analysis:
Construction activities associated with the Project would result in the following types of emissions:

- Fugitive dust from ground-disturbing activities (PM_{10} and $PM_{2.5}$).
- Ozone precursors (ROG and NOx), CO, and particulates (PM_{10}, and $PM_{2.5}$) from vehicle and construction equipment exhaust.

The project is expected to remove a total of 4,308 CY (6,462 tons) of impacted soil generated from the swell of soil unearthed from the subsurface during ISS treatment to accommodate the addition of the binding agents (Portland cement and water mixture) into the subsurface. It is estimated that there will be a total of approximately 294 truckloads of exported impacted soils from the generation of ISS swell for the project. Daily truck trips from the Site will be limited 30 truckloads. There will also be haul trips to the Site for import of ISS materials including Portland cement, which is estimated at a total of approximately 99 truckloads for the project or 2 truckloads per day. These haul truck activities will generate short-term emissions of fugitive dust (PM10 and PM2.5), CO, and ozone precursors (ROG and NOx). Additionally, the operation of on-site heavy construction equipment, project personnel/worker and equipment/supply/service vehicle trips to the Site daily, soil handling activities (loading/ stockpiling/grading), and operation of the ISS diesel-driven concrete batch plant may also generate short-term emissions of fugitive dust (PM10 and PM2.5), CO, and ozone precursors (ROG and NOx).

The estimated daily pollutant emissions from the project are based on the worst-case maximum emissions that may be generated from the project using the air modeling program *California Emissions Estimator Model* (CalEEMod) version 2016. This air model was developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with the California Air Districts. The model is a comprehensive tool for quantifying air quality impacts from land use projects located throughout California. Project-specific data were input into the model where known; otherwise, model default values were used. The daily maximum emission estimate includes exhaust emissions from off-road construction equipment (excavator, loader, drill rig, fork lift, water truck, street sweeper, paving equipment, grader, and similar) planned for use during the project; exhaust emissions from haul truck trips of ISS soil swell export at a daily rate of 5 truckloads and haul trucks trips for the import of ISS binding agents (Portland cement powder) at a daily rate of 2 truckloads; exhaust emissions from 8 daily truckloads of demolition waste, 3 daily equipment/supply/service trucks, and 13 daily project personnel vehicles over the various project phases; and, emissions of particulates from heavy construction equipment exhaust, vehicle exhaust, haul truck exhaust, and from earthwork/soil handling activities. As summarized in Tables 3 and 4 below, estimated worst-case daily emissions of pollutants from project activities using the CalEEMod version 2016 air modeling program are less than the established MBUAPCD thresholds for ROG, CO, and NOx (Table 3), and PM10 and PM2.5 (Table 4).

Therefore, the project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Attachment D includes the CalEEMod run model output reports. The maximum daily air emissions presented in Tables 3 and 4 (below) do not include the BMPs planned for use during the project (presented above in item (a). Therefore, implementation of these BMPs will reduce the estimated worst-case daily emissions presented herein in Tables 3 and 4, thereby ensuring the MBUAPCD air quality standards are not exceeded during the project.

Table 3
Estimated Project Emissions from
Construction Equipment Exhaust, Construction Activities, and Mobile Sources

Pollutant	CalEEMod Results [1]			MBUAPCD Threshold [2] (lbs/day)
	Total Project Daily Emissions-Summer ERs (lbs/day)	Total Project Daily Emissions-Winter ERs (lbs/day)	Total Project Emissions-Annual ERs (tons/year **)	
ROG	8.8205	8.8600	0.2070	137
NOx	98.3569	99.1306	2.4026	137
CO	60.7334	60.9009	1.3861	550
SO2	0.1751	0.1743	4.2300 E-003	NA
Total CO2	17,595.0883	17,506.5854	387.6017**	NA
CH4	3.2291	3.2386	0.0744**	NA
N2O	0.0000	0.0000	0.0000	NA
CO2e	17,675.8146	17,587.5495	389.4615**	NA

Notes:

1. CalEEMod version 2016 air modeling program used with project total duration estimated at 18 weeks (90 days).
2. MBUAPCD Air District Guidelines for Implementing CEQA, dated February 2016, accessed at: http://mbard.org/wp-content/uploads/2016/03/Attachment_Guidelines-for-Implementing-CEQA.pdf

** Annual emissions of Total CO2, CH4, and CO2e in units of metric tons (MT) per year (MT/year)

NA = not applicable; threshold has not been established for pollutant

ERs = emission rates

lbs/day = pounds per day

Table 4
Estimated Project Emissions of PM10 and PM2.5 from
Construction Equipment Exhaust, Construction Activities, and Mobile Sources

Pollutant	CalEEMod Results [1]			MBUAPCD Threshold [2] (lbs/day)
	Total Project Daily Emissions-Summer ERs (lbs/day)	Total Project Daily Emissions-Winter ERs (lbs/day)	Total Project Emissions-Annual ERs (tons/year)	
PM10 total	14.0254	14.0267	0.3420	82
PM2.5 total	7.4259	7.4272	0.2023	55

Notes:

1. CalEEMod version 2016 air modeling program used with project total duration estimated at 18 weeks (90 days).
2. MBUAPCD Air District Guidelines for Implementing CEQA, dated February 2016, accessed at: http://mbard.org/wp-content/uploads/2016/03/Attachment_Guidelines-for-Implementing-CEQA.pdf

ERs = emission rates

PM10 total and PM2.5 total includes fugitive PM and Exhaust PM emissions

lbs/day = pounds per day

For off-road construction equipment used during the project (i.e., excavator, loader, etc.) for placement of ISS binding agents, truck loading/unloading, grading, and finished surface materials placement (bulldozing, compaction, and/or paving), more stringent control measures for NOx will be integrated into the Project to ensure average daily pollutant emissions remain below the MBUAPCD threshold of significance. These additional control measures for NOx were not included in the air emission analysis using the CalEEMod air modeling program, and are therefore not reflected in the estimated project emissions presented above in Table 3, but will serve to further reduce emissions below the estimated maximum daily levels presented above in Table 3. These additional control measures will include:

- Idling time for all equipment will be minimized, with a special emphasis on reducing idling time from diesel-powered construction equipment. Idling times will be minimized either by shutting off equipment when not in use or limiting the maximum idling time for all equipment to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR).
- All construction equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NOx, to the extent possible, and consist of Tier 3 or newer engine.
- All contractor construction equipment will be maintained and properly tuned in accordance with manufacturer specifications.
- Motors, pumps, tools and other power equipment will be electrical where feasible.

Implementing these additional control measures will further reduce NOx emissions below the levels estimated (Table 3 above), ensuring that the average daily NOx emissions for the project remain below the MBUAPCD threshold of significance.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

c. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Impact Analysis:
Criteria pollutants that are in non-attainment of state and/or federal ambient air quality standards in the NCCAB are ozone (precursors are ROG and NOx) and PM10. The project's contribution to a cumulative air quality impact would be considerable if the incremental increase in emissions from the project of ozone precursors and PM10 exceeds the established significance thresholds. As shown above in Tables 3 and 4, the proposed Project's pollutant emissions of ozone precursors, PM10, and PM2.5 would be below the established significance thresholds. Therefore, the project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

d. Expose sensitive receptors to substantial pollutant concentrations.

Impact Analysis:
The closest sensitive receptors to the project consist of residential areas comprised of one apartment building located directly east of the Site across Bridge Alley, and several apartment buildings located approximately 250 feet north of the Site across Universal Auto Repair and East Lake Street (Attachment B- Figure 2). Loading of contaminated soils unearthed as soil swell from the ISS operation into haul trucks may generate airborne dust containing Site Contaminants of Concern (COCs), which could potentially expose nearby sensitive receptors to Toxic Air Contaminants (TACs). Diesel Particulate Matter (DPM) from construction equipment exhaust, a specific TAC established by the MBUAPCD, could also potentially contribute to a health risk impact at nearby sensitive receptors (residences). However, the project is a small area (~1 acre), impacted soil construction activities will be localized to certain areas of the 1-acre Site (Attachment B- Figure 4), and the project is of temporary nature (duration of 18 weeks or 90 days) thereby only having a limited, temporary potential for nearby sensitive receptors to be exposed to pollutants. Construction practices such as loading of haul trucks with impacted soil in the south and western areas of the Site away from the nearest sensitive receptors will be conducted to reduce potential exposure impacts to near-by sensitive receptors. Further, it is expected that the implementation of BMPs and NOx control measures previously discussed above in items (a) and (b) such as wetting soils, limiting the duration of exposed soil surfaces, halting work during periods of high winds, equipment idling time reduction, and proper construction equipment engine tuning to reduce NOx, and similar will help to reduce the amount of TACs and DPM released into the air from the Project, thus reducing the sensitive receptors potential for exposure. With these construction practices,

BMPs, and NOx control measures in mind, and accounting for the temporary nature of the Project, it is reasonable to expect the increase in potential health risk impact of TACs and DPM emissions to be less than significant.

With specific regard to TACs from the release of COCs in contaminated soil dust generated form project activities, the MBUAPCD has established the following thresholds for TAC exposure to ensure compliance with MBUAPCD Rules 1000 and 1003:

- Hazard index less than 1 for acute or chronic impacts.
- Cancer risk less than 10 in one million.

Pursuant to MBUAPCD, if the project risk analysis shows the above thresholds for TAC exposure are met, it can be concluded that the project will not have a significant impact with respect to TACs for sensitive receptors. From a qualitative stand-point, before any contaminated soil disturbing activities are conducted, control measures incorporated into the Project will include the preparation of a site-specific Environmental Control and Monitoring Plan (ECMP). The ECMP will contain a list of minimum dust control measures that must be implemented during the project, development of a project-specific real-time dust action level and VOC action level that meet all requirements of the MBUAPCD, and development of site-specific health risk-based COC action levels for comparison to perimeter/fence line air samples to be collected and analyzed throughout contaminated soil disturbing activities. These project-specific health risk-based COC action levels for perimeter/fence line air sample monitoring derived and presented in the ECMP will ensure the Project complies with the MBUAPCD Rules 1000 and 1003 and the TAC thresholds listed above. The ECMP will be prepared prior to the start of project activities. The ECMP will contain at a minimum the following measures to ensure project emissions remain below the MBUAPCD thresholds and meet all health risk criteria:

- Use of water to wet the soils being removed from the ground or spread during fill placement and grading.
- Mist and cover soils placed in trucks.
- Mist and cover all soils stockpiled. Re-mist when stockpiled uncovered.
- Excavator operators will load or unload or stockpile soils from the leeward side.
- Equipment operators will minimize the soil drop height from excavator's bucket onto soil piles and into transport trucks.
- Contaminated soils will be moved directly to the on-site waste consolidation area as it is generated to minimize stockpiling to the maximum extent possible.
- Real-time monitoring of dust and evaluation of the dust data against a site-specific action level.
- Real-time monitoring of VOCs and evaluation of the VOC data against a site-specific action level.
- Perimeter air sampling for COCs, and evaluation of the analytical data against site-specific health risk-based action levels.

During all construction activities, air monitoring will be conducted in the work zone and at the Project perimeter/boundary to verify and document the effectiveness of the dust suppression control measures that are in-place. Airborne particulate monitoring for Site COCs through the use of personal dust meters and site boundary instrumentation and analysis will be conducted to verify and document the effectiveness of the dust suppression measures, and adherence to the requirements listed in the ECMP. Factors considered in providing fugitive dust control measures will include wind direction, wind speed, and available dust control and dust suppression methods. Consequently, no impacts to sensitive receptors are expected to occur.

Additionally, the MBUAPCD will be contacted prior to the start of the Project, and a permit to operate may be obtained from the MBUAPCD before project activities commence, if needed based on consultation with the air district. With implementation of the construction practices, BMPs and planned control measures previously described in item (a) and (b) above along with development and compliance with a site-specific ECMP, and any additional measures that the MBUAPCD may impose during project planning and possible permitting, impacts to sensitive receptors would be less than significant.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

e. Create objectionable odors affecting a substantial number of people.

Impact Analysis:
Odors may be emitted during the handling of impacted soil that is unearthed during ISS treatment. Environmental control measures planned to minimize criteria pollutant and fugitive dust emissions (see above item 3d) will also minimize the potential for odors from equipment exhaust, vehicle exhaust, and impacted soils. The Site is located in a commercial mixed-use area of the City with primarily commercial businesses in the immediate vicinity. The use of current, energy efficient equipment, the nature of the Site, and implementation of environmental controls previously described will eliminate the possibility of objectionable odors migrating off the Site and affecting a substantial number of people. In addition to the environmental control measures previously discussed, spray products and foam suppressants that can be applied to soil stockpiles, exposed soil surfaces, and/or the ISS soil swell as it is unearthed from the subsurface will be available and may be additionally employed during construction activities as needed to minimize nuisance odors encountered during the project. Therefore, objectionable odors from the Project will not affect a substantial number of people and will have a less than significant impact.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

f. Result in human exposure to Naturally Occurring Asbestos.

Impact Analysis:
There would be no potential for exposure to naturally occurring asbestos in the project area. According to the map in the report *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos* (Department of Conservation, Open-File Report 2000-19), the project site is not located in an area containing naturally occurring asbestos.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

1. 2005 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region, Senate Bill 656 Implementation Plan, December 1, 2005, accessed on June 27, 2016 at: http://mbuapcd.org/pdf/358%20(1).pdf
2. 2008 Air Quality Management Plan Monterey Bay Unified Air Pollution Control District, August 2008 accessed June 27, 2016 at: http://mbuapcd.org/wp-content/uploads/2015/01/2008-AQMP-Combined.pdf
3. California Air Resources Board (CARB), Air Quality Standards and Area Designations accessed June 27, 2016 at: http://www.arb.ca.gov/desig/desig.htm
4. CARB Mobile Sources Emissions Inventory, EMFAC 2014 web database accessed at: http://www.arb.ca.gov/emfac/.
5. California Emission Estimator Model (CalEEMod) Users Guide, Appendix A Calculation Details and Appendix D Default Data Tables, prepared for California Air Pollution Control Officers Associated (CAPCOA), prepared by ENVIRON International Corporation, Revised July 2013, CalEEMod v.2023.2.
6. Department of Conservation. 2000. A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos, August.
7. Final 2012 Triannual Plan Revision 2009 -2011, Monterey Bay Unified Air Pollution Control District, Adopted by District Board on April 17, 2013, accessed June 27, 2016 at: http://mbard.org/pdf/Final_Triennial_Plan_Revision_041913.pdf

8. MBUAPCD Guidelines for Implementing California environmental Quality Control Act, February 8, 2016 accessed June 27, 2016 at: http://mbard.org/wp-content/uploads/2016/03/Attachment_Guidelines-for-Implementing-CEQA.pdf
9. Monterey Bay Unified Air Pollution Control District CEQA Air Quality Guidelines, 2008 accessed June 27, 2016 at: http://mbard.org/pdf/CEQA_full%20(1).pdf
10. NCCAB Area Designations and Attainment Status accessed June 27, 2016 at: http://mbuapcd.org/wp-content/uploads/2015/01/attainment-status-january-2015.pdf
11. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.

4. Biological Resources

Project Activities Likely to Create an Impact:

- Drilling to remove existing groundwater and soil vapor wells, drilling following remediation to install new groundwater and soil vapor wells, and collect confirmation soil samples from the ISS treatment area.
- Stockpiling of contaminated material using appropriate construction equipment (may include excavator, backhoe, bulldozer, or grader).
- Loading the contaminated soil into haul trucks.
- Off-site transport and disposal of contaminated soil.
- Importing ISS binding agents (Portland cement powder) and finished surface materials and unloading these materials from haul trucks.
- Grading Site areas to establish rough grades to restore existing topography and drainage patterns using appropriate construction equipment (may include front end loader, roller, and/or grader).
- Operation of diesel-driven batch plant to mix ISS products (water, Portland cement powder) and use of a drill rig and/or excavator with mixing attachment to place into subsurface.
- Capping the Site surface including paving and/or placement of concrete or crushed rock to restore the Site to pre-remediation conditions.

Description of Baseline Environmental Conditions:
The Site is located in an area zoned mixed arterial frontage (MAF) district. The MAF district land-use designation provides a combination of mixed use, commercial and small-scale non-nuisance industry. The surrounding land use is primarily commercial, with some residential areas. The areas north and east of the Site are zoned for mixed use. The areas west and south of the Site are zoned for MAF, similar to the Site. Commercial retail and mixed-use zones are located further south of the Site across the railroad tracks. The surrounding area consists of paved streets and commercial businesses with some residential apartments located north and east of the Site beyond the paved City roads (Attachment B- Figure 2). The Site and immediate vicinity do not contain any landscaping, vegetation, riparian areas, or wetland areas. The Site is currently vacant/unoccupied with the exception of the unmanned PG&E gas regulator station in the southeast section. The Site is partially paved and is otherwise finished with unimproved gravel with no landscaping, trees, or vegetation. There are no surface water bodies or riparian areas in the Site vicinity as shown in Attachment B- Figure 2 Aerial View of Site and Surrounding Area. Therefore, candidate, sensitive, or special status species are not anticipated to occur within the Project boundaries or immediate vicinity.

Analysis as to whether or not project activities would:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Impact Analysis:
On June 28, 2016, a review of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) records on endangered, special status, and threatened species and their habitat within the United States Geographical Survey (USGS) Salinas Quadrangle was conducted. This evolving database yielded three federal and/or state listed animal species and four federal and/or state listed plant species with threatened, candidate threatened, or endangered status that are known to have been sited within the USGS Salinas Quadrangle.. A review of the United States Department of Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS) Information for Planning and Conservation (IPaC) online mapping tool for the Site address revealed 12 endangered species and 24 migratory birds that may occur or could be potentially affected at the project Site. There were no critical habitats identified at the Site in these databases. Additionally, a review of the USFWS Critical Habitat Portal on June 28, 2016 indicates

there are no wildlife refuges, wetlands, or critical habitats at the project Site. Therefore, because of the Site's current zoning designation as mixed arterial frontage, its existing vacant and partially paved condition with no vegetation, landscaping, or trees, and the existing commercial and residential development in the surrounding area, it is unlikely that any of the identified endangered, and/or threatened species, animal species, migratory birds, and plant species would find the Site or vicinity suitable for habitation. Further, the Site does not contain suitable habitat for the identified species, therefore the proposed project will not alter habitat and/or result in modification of habitat for candidate, sensitive, or special status species. Prior to the start of construction, a pre-construction biological survey will be conducted at the Site to verify and document protected species and/or habitats are not present at the Site.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Impact Analysis:
There is no riparian habitat at the Site or vicinity. The Site is situated in an urbanized and developed area of the City zoned for mixed arterial frontage and does not contain any natural areas nor do any occur within the immediate vicinity of the project Site. There are no other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game and the US Fish and Wildlife Service at the Site that could be adversely affected by the project. According to the CNDDB and USFWS databases there are no wildlife refuges, wetlands, or critical habitats at the project Site.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Impact Analysis:
There are no federally protected wetlands at the project Site. Therefore, construction activities will not impact any protected wetland associated with the project.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Impact Analysis:
As noted above, the Site is located in an area zoned for mixed arterial frontage and is surrounding by commercial and residential properties (apartment buildings). They are no sensitive flora or fauna within the bounds of the Site itself. There is no surface water or surface water impoundments at the Site or immediate vicinity. All construction work will be confined within the property boundary; therefore, there will be no interference with movement of any native resident or migratory fish or wildlife species.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated

☐ Less Than Significant Impact
☒ No Impact

e. Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impact Analysis:
Because there are no sensitive biological resources at the Site, there would be no conflict with any of the local policies or ordinances protecting biological resources

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact Analysis:
The project is not located within a habitat conservation plan area, local community conservation plan area, or local habitat plan area. The project is not located on or near agricultural land or important farmland as identified in Figures COS-1 and COS-2 of the City of Salinas General Plan Conservation/ Open Space Element. Also, the Site is not part of a Williamson act parcel as there are no designated farmland security properties or Williamson act parcels located within the City of Salinas limits according to Figure #AWCP4 of the Monterey County General Plan. Further, the project is not located within a special treatment area as outlined in the land use section under the Monterey County General Plan - Greater Salinas Area Plan. The Site does not conflict with any area planning described in the Monterey County General Plan-Greater Salinas Area Plan or the City of Salinas General Plan. Because the project Site does not contain habitat value or involve development or redevelopment of the Site (project Site will be restored to existing grade at the end of construction with pavement and/or crushed rock to match existing condition), and because the Site is not part of a habitat conservation plan or natural community conservation plan, the proposed project does not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or approved local/regional/state habitat plan.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

1. California Department of Fish and Wildlife (formerly California Department of Fish and Game), California Natural Diversity Database, CNDDB Quick View Tool in BIOS, Zoom to Quad at: www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp accessed June 28, 2016.
2. City of Salinas General Plan, September 2002, accessed on June 28, 2016 at: http://www.ci.salinas.ca.us/services/commdev/generalplan.cfm
3. Monterey County Community General Plan dated June 2005, accessed on June 28, 2016 at: http://www.landwatch.org/pages/pubs05/cgp/pages/23greatersalinas.html
4. Salinas Community Development, 2010, Official zoning map, city of Salinas: Downloaded from http://www.cityofsalinas.org/services/commdev/current_planning.cfm on June 23, 2016.
5. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.
6. U.S. Fish & Wildlife Service Environmental Online Conservation System (ECOS) critical habitat report online mapper search by Site address, and iPAC planning tool to identify species list, critical habitat, and wetlands within defined Site area at: https://ecos.fws.gov/ipac/ and http://ecos.fws.gov/ecp/report/table/critical-habitat.html accessed on June 28, 2016.
7. Monterey County Resource Management Agency, Figure #AWCP4, Williamson Act Lands, October 20, 2010 accessed on February 5, 2018 at: http://www.co.monterey.ca.us/planning/gpu/GPU_2007/2010_Mo_Co_General_Plan_Adopted_102610/Figures_for_Agricultural_and_Winery_Corridor/FigAWCP4_Wllmsn_Act_Lands.pdf

8. Monterey County General Plan, Conservation Open Space Element, October 26, 2010, accessed on February 5, 2018 at: http://www.co.monterey.ca.us/planning/gpu/GPU_2007/2010_Mo_Co_General_Plan_Adopted_102610/Elements_Area-_Master_Plans/03-Conservation-Open%20Space%20Element_Board%20action.pdf
9. Monterey County General Plan, Greater Salinas Area, Supplemental Policies, October 26, 2010, Pages GS-1 through GS-8, accessed on February 5, 2018 at: http://www.co.monterey.ca.us/planning/gpu/GPU_2007/2010_Mo_Co_General_Plan_Adopted_102610/Elements_Area-_Master_Plans/09F-Greater%20Salinas%20AP_10-26-2010.pdf

5. Cultural Resources

Project Activities Likely to Create an Impact:

- Surface disturbing activities followed by ISS treatment.
- Drilling and removal of existing groundwater and soil gas wells.
- Drilling and collection of confirmation soil samples following ISS treatment.
- Drilling and installation of post-remediation groundwater and soil gas wells
- Site restoration activities including grading and paving and/or placement of crushed rock.

Description of Baseline Environmental Conditions:
A cultural resource review and survey was completed for the project site in August 2015. This report is included in Attachment C. The survey included a records search for the project site and a 0.25-mile radius area surrounding the project site, consultation with the Native American Heritage Council (NAHC), and a field reconnaissance of the project site. The records search included the review of the National Register of Historic Places (NRHP) database, California Register of Historical Resources, California inventory of historic resources, California State Historical Landmarks, California State Points of Historical interest, Office of Historic Preservation's Historical property data file, City of Salinas Historic Register, and consultation with the Native American Heritage Commission. Overall, the records search indicated no known cultural resources are present within the project site, and none were observed during the field reconnaissance conducted at the project site. The records search did reveal 17 cultural resources within the 0.25-mile study area surrounding the project site. These resources consist mostly of historic buildings located south of the project site and railroad and west of Main Street (State Route 183) within the historic downtown area. Several of these buildings are associated with the proposed Salinas Southern Pacific Railroad Historic District, the period of significance for which ranges from 1875 to 1942. Only one archaeological site (P-27-002764) was identified within the 0.25-mile record search area. This site consists of a privy pit and debris associated with the former Salinas Hotel, which occupied that location from the late 1860s to the late 1980s. The Juan Bautista de Anza National Historic Trail was identified in close proximity to the southern portion of the project site. The significance of this trail is it commemorates the route taken by Anza in 1775-1776 when he led a group of colonists from Sonora, Mexico to San Francisco Bay. The Monterey County Bank Building, located approximately 0.25 mile south of the project site, was identified as a Historic Resource by the City of Salinas. A response from outreach with the Native American Heritage Commission revealed a review of the sacred lands file did not indicate any Native American cultural resources or sacred lands in the immediate project area, but cautioned that the lack of information did not indicate the absence of resources. A response from outreach letters sent to a list of potentially interested Native American individuals and organizations provided by the Native American Heritage Commission was received from a historian with the Amah Mutsun Tribal Band revealing the project area falls within an area that was formerly occupied by the Mutsun speakers. This response requested a Native American monitor be present during subsurface excavations, and that Chairperson Val Lopez be contacted.

A review of past site assessment reports indicates there is one location at the project site where subsurface features may be present. This location includes wood debris encountered at 4.5 to 5 feet below the Site surface overlying a void space that extended to 8 feet below the surface on the east side of the project site at RI boring location P-40. It was stated that this location could represent past activities associated with the early Salinas Chinese immigrants, although this is a slim possibility as the Chinese moved into the area after the Southern Pacific Railroad arrived in 1872, and the MGP was established the following year in 1873. Thus, it is likely that the location of possible subsurface feature is more likely associated with the MGP, which operated between 1873 and 1934. According to former MGP Sanborn maps, RI boring P-40 is located just north of a former MGP platform that was removed in 1925. Otherwise, this feature could also possibly represent an unmapped underground storage facility.

The report recommends earth-disturbing activities associated with the project be monitored by a qualified archaeologist, and that Chairperson Val Lopez be contacted to provide a Native American monitor. In the event the monitors determine that the void area identified on the east side of the project site is cultural rather than a naturally occurring feature, or that

any suspected cultural and/or archaeological resource is unearthed during project activities, the area should be subjected to survey and recordation to determine its extent and character prior to continuing construction activities in that area of the project site.

Analysis as to whether or not project activities would:

a. Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5.

Impact Analysis:
No historical resources have been identified at the project site. Therefore, ISS treatment and removal of impacted soil via soil swell and limited grading as part of site restoration following ISS treatment will not cause an adverse change in the significance of a historical resource.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5.

Impact Analysis:
No archeological resources have been identified at the project site. Therefore, ISS treatment and removal of impacted soil via soil swell and limited grading as part of site restoration following ISS treatment will not cause an adverse change in the significance of an archeological resource. However, in the event a possible archaeological resource is unearthed during ground disturbing activities, project personnel will consult with a qualified archaeologist. DTSC staff will also be notified, informed, and collaborate in the decision-making process on this situation.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Impact Analysis:
There are no known paleontological resources or unique geologic features located on the project site or within a 0.25-mile radius of the Site. Refer to the above Description of Baseline Environmental Conditions. However, if any paleontological resources are encountered during the course of ground disturbing activities, such activities will be temporarily suspended, and a qualified paleontologist will be contacted to assess the discovery. The qualified paleontologist will identify the specimen to the lowest taxonomic level and if determined to be significant, the specimen will be delivered to a curator at a qualified institutional repository. DTSC staff will also be notified, informed, and collaborate in the decision-making process on this situation.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

d. Disturb any human remains, including those interred outside of formal cemeteries.

Impact Analysis:
There are no known human remains located on the project site or within 0.25- mile radius of the Site. Refer to the above Description of Baseline Environmental Conditions. However, in the event of accidental discovery or recognition of any human remains, work will immediately be suspended, and the County Coroner notified to determine its origin. DTSC staff will also be notified. If the County Coroner determines that the human remains are Native American, he will contact the NAHC within 24 hours. Additionally, procedures prescribed under CEQA Guidelines, CCR section 15064.5(e) and H&SC

section 7050.5 will be implemented to ensure compliance with the appropriate California laws and regulations in protecting cultural resources.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:
1. Letter report, Cultural Resources Review of the Former Salinas Manufactured Gas Plant Site Project, Salinas, Monterey County, California, addressed to Mr. Christophe Descantes, Pacific Gas and Electric Company, from Allika Ruby, Far Western Anthropological Research Group, Inc., August 11, 2015.

6. Geology and Soils

Project Activities Likely to Create an Impact:
- Activities that disturb the surface of the soil (e.g. drilling to remove and install wells and collect confirmation soil samples, removal of existing pavement/gravel cover, grading, ISS treatment via drilling to inject ISS binding materials) may increase erosion.

Description of Baseline Environmental Conditions:
The project site is situated in the Salinas Valley, the largest southern California Coastal Basin. The Salinas Valley lies within the southern Coast Ranges between the San Joaquin Valley and the Pacific Ocean. The valley is drained by the Salinas River, which extends approximately 120 miles from the headwaters in the Santa Margarita area to Monterey Bay and is bordered by the Gabilan Range on the northeast and by the Sierra de Salinas and Santa Lucia Range on the southwest. The Salinas Valley lies within a northwest-trending structural trough formed, in part, as a result of normal faulting along the King City (Rinconada-Reliz) fault, which generally follows the western margin of the valley from King City in the south to Monterey Bay in the north. Normal displacement along the fault (valley-side down), allowed the deposition of an asymmetric, westward thickening alluvial wedge. The valley has been filled with up to 15,000 feet of Tertiary and Quaternary marine and terrestrial sediments, which include up to 2,000 feet of saturated alluvium. Water-bearing sedimentary units resting above the granitic basement include the Monterey Formation, Paso Robles Formation, and Pleistocene- to Holocene-age alluvium.

Logs of borings drilled at the Site indicate fill materials are present within the upper 5 to 10 feet of the ground surface. Below the fill, soils consist primarily of fine-grained organic soils comprised of organic silt, clay, and sandy clay to depths ranging from approximately 35 to 40 feet below the surface. The fine-grained organic soils are underlain by discontinuous water-bearing lenses of sand and gravel varying in thickness from 2 to 5 feet on average, with the exception of one location on the east side of the project site (RI boring GP-1) where this unit was observed to have a thickness greater than 14 feet. Boring logs indicate that alternating layers of sand, gravel, silt, and clay containing groundwater occur below the project site between depths of 35 and 69 feet below the surface. Water level measurements taken from Site groundwater indicate the depth to groundwater ranges from approximately 31 to 42 feet below the surface.

Analysis as to whether or not project activities would:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

   - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42).

   - Strong seismic ground shaking.

   - Seismic-related ground failure, including liquefaction.

   - Landslides.

Impact Analysis:
According to the State of California Department of Conservation Regulatory Maps Portal and the Alquist-Priolo Earthquake Fault Zoning Map, there are no mapped fault zones delineated within the Salinas quadrangle and therefore there are no mapped fault zones in the City of Salinas and at the project site. According to the City of Salinas General plan, there are no active faults located in the City of Salinas. Therefore, there is low potential for substantial adverse effects, including the risk of loss, injury, or death resulting from a rupture of a known earthquake fault at the project site.

As shown on the Department of Conservation Fault Activity Map of California 2010, the closet earthquake faults to the City of Salinas and project site are the Reliz fault located to the west in the Salinas River Valley, and the San Andreas Fault located to the east outside the Monterey County limit. East of the Site between the City of Salinas and the San Andreas Fault there are two unnamed, discontinuous faults mapped in the Diablo Range on the Department of Conservation Fault Activity Map of California 2010. According to the USGS Map of the Rinconada and Reliz Fault Zones, Salinas River Valley, California, 2009, multiple earthquake epicenters, indicative of seismic active areas and ground shaking, have been mapped east of the Site along the San Andreas Fault. According to the 2002 City of Salinas General Plan, the King City and Gabilan Creek faults are located within the City planning area. However, these faults have not been active in the last 11,000 years. Further, the City General Plan cites the greatest seismic threat to be related to the San Andreas Fault and the Calaveras Fault, which extends east from the San Andreas Fault through Hollister northward to the San Francisco Bay area. Therefore, there is potential for seismic ground shaking to occur at the project site, although the potential is low as these faults have shown little activity near the project site in the recent years.

The City of Salinas is classified as being within Seismic Zone 4 (on a scale of 1 to 4, where 1 is least hazardous and 4 is most hazardous) of the Uniform Building Code's (UBC) Seismic Hazard Map. This designation is based on probability of significant ground shaking in a seismic event. According to the City of Salinas General Plan, the project site is located in an area of the city designated with a seismic hazard zone of moderately high.

According to the City of Salinas General Plan, liquefaction occurs primarily in areas of recently deposited sands and silts, in areas of high groundwater levels, and in areas with earthquake activity. Especially susceptible areas of liquefaction in the City include areas of former sloughs, wetlands, and marshes that have been filled in. The Site is not known to be located in a former marshland, wetland, or slough. Site soils consists of artificial fill in the upper 5 to 10 feet overlying fine grained soils comprised of organic silt, clay, and sandy clay. Therefore, the liquefaction potential at the project site is low.

The Site and surrounding area are relatively flat. According to the City of Salinas General Plan, the Monterey County Planning Department depicts all urbanized areas of the City and planning area as "least landslide and erosion susceptibility." Further, according to the City General Plan, most of the City has slopes of one to 10 percent. Therefore, the potential for substantial adverse effects, including the risk of loss, injury, or death at the project site related to landslides is unlikely.

The project involves demolition of surface features including pavement and former building foundations, ISS treatment of soils to depths of up to 35 feet below ground surface with off-site disposal of soil swell, import of ISS materials (Portland cement), grading and restoration of the Site to its original grade with a paved surface and/or crushed rock. The project does not involve excavation, or construction of any structures that would expose people to adverse effects from seismic activity. Standard engineering practices will be implemented and incorporated into the design to ensure people and structures will not be subject to adverse effects from ground shaking during demolition, ISS treatment, and grading/restoration activities.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Result in substantial soil erosion or the loss of topsoil.

Impact Analysis:
Soils in the area are prone to erosion via wind and stormwater. Driving over, scraping, excavating, stockpiling unearthed soils, or otherwise disturbing the existing paved surface could result in soil erosion during windy weather conditions or periods of rain. However, soil erosion will be controlled by implementation of preventive measures and best management practices including placement of gravel bags, straw wattles or similar soil erosion prevention strategies at the work area limits, covering all soil stockpiles and frequent wetting of exposed soil surface by water truck and/or hoses connected to local fire hydrants to contain fugitive dust. Air and Dust emission control measures are outlined in the RAP and will be

depicted in greater detail in the ECMP to be prepared prior to the start of remediation. Implementation of these measures will reduce soil erosion impacts to less than significant level.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Impact Analysis:
The project site and surrounding area are relatively flat. The proposed remedial activities are not expected to result in off-site landslides, lateral spreading, subsidence, liquefaction or collapse. The sidewalls of excavations deeper than five feet will be laid back by sloping or supported by shoring or alternative methods recommended and/or approved by the soils engineer. Excavations will be backfilled with clean imported material, compacted, and restored to its original grade.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Impact Analysis:
The proposed project does not involve construction of structures that would be affected by expansive soils. Soils within the top 5 to 10 feet of the ground surface consist primarily of fill soils. Underlying soils below 10 feet consist primarily of fine-grained silt, clay, and sandy clay to depths ranging from approximately 35 to 40 feet below the surface. Excavation is limited to a depth of 10 feet within a localized area. The excavation cavities will be backfilled with granular soil, or other appropriate material, tested and approved by the soil engineer. The excavations will be backfilled and compacted in accordance with local/state requirements. The surface will be graded to match existing conditions. Therefore, project activities will not create substantial risks to life or property.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Impact Analysis:
No septic tanks or other waste disposal systems will be used on this project. All waste will be hauled off-site to a permitted disposal facility. Restrooms for workers during the project will consist of portable toilets that are emptied routinely and disposed off-site.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:
1. California Division of Mines and Geology Special Publication 42 (interim revision 2007), Fault-Rupture Hazard Zones in California, Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zone Maps.

2. City of Salinas General Plan, September 2002, Safety Element, pages 309 – 312 accessed on June 28, 2016 at: http://www.ci.salinas.ca.us/services/commdev/generalplan.cfm
3. Fault activity map of California 2010 accessed on June 28, 2016 at: http://maps.conservation.ca.gov/cgs/fam/
4. State of California Department of Conservation Regulatory Maps Portal accessed on June 28, 2016 at: http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.
5. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.
6. USGS Map of the Rinconada and Reliz Fault Zones, Salinas River Valley, California, 2009 Scientific Investigations Map SIM-3059, accessed June 29, 2016 at: http://ngmdb.usgs.gov/Prodesc/proddesc_86420.htm

7. Greenhouse Gas Emissions

Project Activities Likely to Create an Impact:

- Presence and operation of excavation and construction equipment.
- Demolition of exiting pavement and building foundations and loading demolition debris onto dump trucks.
- Excavation of impacted soil using construction equipment and loading excavated soil onto dump trucks.
- Transportation of impacted soil and demolition debris to appropriate off-site permitted disposal facilities.
- Transportation of clean fill material from off-site quarry to the Site.
- Transportation of ISS materials to the Site.
- Backfilling and grading of excavated areas with clean fill materials.
- Final restoration of site surfaces to match pre-remediation/existing site grades.
- Operation of on-site cement mixing plant.
- Operation of a drill rig to place and mix the ISS materials into the subsurface.
- Operation of a drill rig to remove existing groundwater and soil vapor wells, collect confirmation soil samples, and install post-remediation groundwater and soil gas wells.
- Use of vehicles to bring personnel and supplies to the Site during construction.

The major category of greenhouse gas (GHG) emissions associated with the project is CO_2 from diesel-fueled heavy equipment and trucks. Project construction activities would involve the use of various types of heavy equipment. Emissions of CO2 would result from the use of fossil fuels used to power the heavy equipment. Excavators and other earth moving equipment will be required to remove and load the impacted material onto trucks. Drill rigs will be required to remove existing groundwater and soil vapor wells, place ISS materials into the subsurface, and install new groundwater and soil vapor wells at the end of the project. Trucks will be required to transport the excavated material to off-site landfills and import clean fill and ISS materials from off-site. In addition, vehicles will be used to bring works and supplies to the Site. The use of heavy equipment will be required to backfill and compact the excavation with clean imported fill materials and to pave the Site and/or place a crushed rock finished surface. A diesel-driven concrete batch plant will operate to mix the ISS materials prior to placement in the subsurface.

Description of Baseline Environmental Conditions:
Other than an unmanned PG&E gas regulator station, the project Site consists of vacant/unoccupied parcels. There are no buildings or operating businesses at the project site. Therefore, there are no current greenhouse gas (GHG) emissions associated with the project site other than the occasional vehicle emissions from passenger vehicles associated with routine operation and maintenance of the PG&E gas regulator station.

During the project, GHG emissions will be generated from heavy construction equipment engine emissions, engine emissions from haul trucks exporting soil and importing ISS materials, supply/equipment delivery truck engines emissions, and passenger (worker) vehicle engine emissions. GHG emissions at the project Site will increase temporarily as a result of the project. However, the project is short-term (18 weeks/ 90 days), and therefore, the increase in GHG emissions is temporary in nature. To reduce the impact and quantity of GHG emissions from the project, sustainability best management practices will be built into the project. These sustainability measures will include (but are not limited to): carpooling of passenger (worker) vehicles, requiring out-of-town workers to stay at a local hotel, identifying suppliers/vendors/Portland cement sources/ disposal facilities, and similar as close to the project Site as feasible, reducing equipment and truck idling on-site, turning off engines during periods of no activity, using newer equipment tiered engines, minimizing the number and type of equipment on-site, and phasing work activities to reduce the number of equipment pieces operating at any one time.

The major category of GHG emissions resulting from human activities is carbon dioxide (CO_2). Several other primary gases that comprise GHG emissions include methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6),

perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere (known as Global Warming Potential or GWP). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weights each gas by its GWP. The following table shows the GWPs for different GHGs for a 100-year time horizon.

Global Warming Potential (GWP) for Greenhouse Gases

GHG Pollutant	GWP
Carbon Dioxide (CO_2)	1
Methane (CH_4)	21
Nitrous Oxide (N_2O)	310
Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs)	Various
Sulfur Hexafluoride (SF_6)	23,900

Source: IPCC Second Assessment Report (SAR), 1996

California has taken proactive steps, briefly described below, to address the issues associated with GHG emissions and climate change.

Executive Order S-3-05

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following GHG emission reduction targets to reduce global warming effects such as climate change. It declared that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. The reduction targets are as follows:

- By 2010, California shall reduce GHG emissions to 2000 levels;
- By 2020, California shall reduce GHG emissions to 1990 levels; and
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.
- Assembly Bill 32, The Global Warming Solutions Act of 2006

Assembly Bill 32, The Global Warming Solutions Act of 2006

In 2006, the California State Legislature adopted the California Global Warming Solutions Act of 2006 (AB 32), focusing on reducing GHG emissions in California to 1990 levels by 2020. As required by AB 32, the California Air Resources Board (CARB) approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 million metric tons (MMT) CO_2e. CARB also projected the state's 2020 GHG emissions under business as usual (BAU) conditions—that is, emissions that would occur without any plans, policies, or regulations to reduce GHG emissions. CARB originally used an average of the state's GHG emissions from 2002 through 2004 and projected the 2020 levels at approximately 596 MMT CO_2e. Therefore, under this original projection, the state must reduce its 2020 BAU emissions by 28.4 percent in order to meet the 1990 target. CARB updated their 2020 BAU emissions estimate to account for the effect of the 2007–2009 economic recession, new estimates for future fuel and energy demand, and the reductions required by regulation that were recently adopted for motor vehicles and renewable energy. CARB's revised 2020 BAU emissions estimate is 507 MMT CO_2e. Therefore, the emission reductions necessary to achieve the 2020 emissions target of 427 MMT CO_2e would be 80 MMT CO_2e, or a reduction of GHG emissions by 15.8 percent.

State of California GHG Emissions - 1990 and 2009

Category	Total 1990 Emissions ($MMTCO_2e$)	Percent of Total 1990 Emissions	Total 2009 Emissions ($MMTCO_2e$)	Percent of Total 2009 Emissions
Transportation	150.7	35%	172.9	38%
Electric Power	110.6	26%	103.6	23%
Commercial	14.4	3%	14.3	3%
Residential	29.7	7%	28.6	6%
Industrial	103	24%	81.4	18%

State of California GHG Emissions - 1990 and 2009				
Category	**Total 1990 Emissions ($MMTCO_2e$)**	**Percent of Total 1990 Emissions**	**Total 2009 Emissions ($MMTCO_2e$)**	**Percent of Total 2009 Emissions**
Recycling and Waste[a]	–	–	7.3	2%
High GWP/Non-Specified[b]	1.3	<1%	16.3	4%
Agriculture	23.4	5%	32.1	7%
Forestry	0.2	<1%	0.2	<1%
Forestry Sinks	-6.7		-3.8	
Net Total	426.6	100%	453	100%

[a] Included in other categories for the 1990 emissions inventory.

[b] High GWP gases are not specifically called out in the 1990 emissions inventory.

Sources: CARB, Staff Report – California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit, (2007); CARB, "California Greenhouse Gas 2000-2009 Inventory by Scoping Plan Category – Summary," http://www.arb.ca.gov/cc/inventory/data/data.htm. Accessed March 2013.

Senate Bill 97

SB 97, enacted in 2007, amended the California Environmental Quality Act (CEQA) to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directed the California Office of Planning and Research (OPR) to develop revisions to the State CEQA Guidelines "for the mitigation of GHG emissions or the effects of GHG emissions" and directed the Resources Agency to certify and adopt these revised State CEQA Guidelines by January 2010. The revisions were completed March 2010 and codified into the California Code of Regulations and became effective within 120 days pursuant to CEQA. The amendments provide regulatory guidance for the analysis and mitigation of the potential effects of GHG emissions. The CEQA Guidelines require:

- Inclusion of GHG analyses in CEQA documents;
- Determination of significance of GHG emissions; and,
- If significant GHG emissions would occur, adoption of mitigation to address significant emissions.

The MBUAPCD has established a threshold for GHG emissions from a stationary source project of 10,000 metric tons per year (MT/yr) of carbon dioxide equivalents (CO2e). If annual emissions of GHG emissions from a project exceed this threshold, then it is assumed that the proposed project will result in a cumulatively considerable contribution of GHG emissions, and mitigation measures must be implemented. Further, the MBUAPCD states that a proposed stationary source project will not have a significant GHG impact if operation of the project will, in accordance with the State CEQA Guidelines Section 15064.4(b)(3), comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions [such as, sources subject to the Cap-and-Trade requirements pursuant to Title 17, Article 5 (California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms)]. The MBUAPCD defines stationary source projects as those projects that include equipment, processes and operations that require an Air District permit to operate. Project GHG emissions include direct and indirect sources emissions. Direct emissions occur as a result of onsite equipment, and offsite sources, directly related to the project such as emissions from worker commute trips and haul truck trips. Indirect emissions occur as a result of a project's actions but are produced from sources not owned or controlled by the project such as offsite emissions from electricity generation, water conveyance, and waste disposal.

In accordance with California's Global Warming Solutions Act established through Assembly Bill 32, the City of Salinas has adopted the U. N. Urban Environmental Accords of 2005 and the US Mayors' Climate Protection Agreements, which have set the City's goal to reduce GHG emissions Citywide to 1990 levels by 2020. The U.N. Environmental Accords 2005 agreement outlines 21 actions that cities can take to establish a "clean, healthy, and safe environment for all members of society." The US Mayors Climate Protection Agreement also developed in 2005 urges the federal government to set climate mitigation goals and enact a market-based greenhouse gas trading system. The agreement also outlines 12 different actions that local governments can take to meet or exceed Kyoto Protocol targets for reducing global warming pollution.

The City of Salinas has also joined 500 local governments around the world by becoming a member of the CCP Campaign, an international effort to curb greenhouse gas emissions which cause global warming by implementing

measures at the local level in transportation, energy and waste sectors. Over 145 cities and counties in the U.S. have joined the campaign, which is coordinated by the ICLEI - Local Governments for Sustainability. This group puts forward the effort to reduce the emission of greenhouse gases within their communities and to make a concerted effort to stop global warming.

The City of Salinas is in the process of establishing a Climate Action Plan. To accomplish this, the City is conducting an assessment of the City's GHG inventory to quantify the past and current GHG emissions from both the municipality and from the other community sources (transportation, residential homes, business and industry). This information enables the City to identify key emissions sectors, prioritize reduction strategies, and set initial reduction levels from which to track program success. It also demonstrates the reductions the Salinas community has made to date. Salinas is currently working with AMBAG to develop a greenhouse gas inventory.

To meet the City's GHG reduction goal to 1990 levels by year 2020, the City of Salinas has conducted the following actions: (1) replaced over 6,000 street lights with energy-efficient light-emitting diode (LED) lights, replaced 50 parking lot lights with LED fixture, and replaced or retrofitted 453 park light fixtures with LED fixtures (2) transitioned many existing City facilities to operate on renewable energy sources such as solar photovoltaic (PV) systems, (3) implemented city-wide policy initiatives in sustainability, green building, conservation, and recycling; (4) installed new electric mixers and controls at the City's Industrial Waste Water Treatment Plant to reduce operation and energy consumption of the former mechanical aerators; and, (5) replaced or upgraded primary HVAC equipment at various City facilities. These projects have resulted in a GHG reduction of 7.5 million tons of CO2 equivalent

Analysis as to whether or not project activities would:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Impact Analysis:
During construction, the Project will generate GHG emissions by contributing emissions of carbon dioxide (CO_2), ROG, and nitrous oxide (N_2O) from the use of fossil fuels that are used to power the construction equipment and vehicles needed to implement the project. Loaders, bulldozers, saw cutting equipment, backhoe, drill rigs, and other earth moving equipment will be required to remove the existing wells, pavement, and building foundation remnants, stockpile and/or load impacted soil onto haul trucks, off-load Portland cement powder imported to the site, blend the ISS binding agents, and install and mix them into the subsurface. Haul trucks will transport impacted soil to off-site permitted landfills and also be used for the importation of ISS binding agents (Portland cement powder) from a local supplier. Construction equipment will also be required to grade the work area after ISS treatment is complete, and to pave the Site, and/or place crushed rock. Lastly, most workers will be expected to arrive at the Site by personal/passenger vehicle, and delivery of materials/supplies will be made by light trucks. The project is expected to remove up to 4,308 CY of impacted soil (294 truckloads) generated from ISS soil swell and import 1,982 tons of Portland cement (90 truckloads). Additionally, haul trips will be needed for the export of demolition waste including existing pavement, building foundations, and well materials (78 truckloads) and for the import of crushed rock and/or pavement materials (72 truckloads) during restoration activities.

The following control measures will be incorporated into this project to the extent feasible and practicable to reduce project GHG emissions:

- Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
- Construction or trucking companies with fleets that that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOx exempt area fleets) may be eligible by proving alternative compliance;
- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5-minute idling limit;
- Diesel idling within 1,000 feet of sensitive receptors is not permitted;
- Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
- Use of trucks and heavy equipment machinery equipped with permitted GHG control systems.

- Recycling or reuse of demolition waste.
- Use of local source(s) for materials such as Portland cement.
- Use of local suppliers for construction material.
- Maintaining crawl speeds of equipment, trucks, and vehicles on-site of 5 mph or less.
- Carpooling and overnight stays at local hotels to reduce commuting distance and daily trips to the Site.
- Use of local labor and subcontractors whenever possible.
- Equipment used during the remediation shall use low sulfur diesel fuel as recommended by the ARB.

Implementation of these measures will reduce impacts of GHG emissions to a less-than-significant level.

An estimate of pollutant emissions resulting from the proposed project was calculated using the CalEEMod version 2016 air modeling program. These emissions were previously presented in Tables 2 and 3 above, and a summary of model input data and model output summary reports from the CalEEMod model runs are included in Attachment D. The estimated maximum daily estimated project emissions presented in Table 2 for CO, NOx, CO2 and CH4 were input into the EPA GHG Equivalencies Online Calculator to estimate the project daily metric tons of GHG emissions in CO_2 equivalents. The EPA GHG Equivalencies Online Calculator can be accessed at: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator. As summarized in Table 5 below, the maximum worst-case daily GHG emissions for the Project are estimated at 21.6 metric tons per day of CO_2 equivalents.

Table 5
Daily Maximum Project Greenhouse Gas Emissions
for all Project Emission Sources

Total Daily Emissions	GHG Component (pounds per day)
60.9009	CO (lbs/day)
17,675.8146	CO2e (lbs/day)
3.2386	CH4 (lbs/day)
99.136	NOx (lbs/day)
21.6	**Daily Maximum GHG Emission expressed as Metric Tons of CO2 Equivalents** for all Off-site Export and Import Haul trucks, Passenger-worker vehicles, delivery trucks, and on-site construction equipment

Notes:

1. Total Daily Emissions of each GHG component based on the maximum daily emission estimate from CalEEMod version 2016 (i.e., highest value of summer and winter emission run results). Refer to Table 3 and Attachment D.
2. Daily Maximum GHG Emission estimate calculated using the EPA GHG Equivalencies Calculator for CO, NOx, CO2e, and CH4 emissions accessed at: **https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.**
3. NOx emissions estimated from CalEEMod are used to estimate the GHG emissions in-place of NO2 as CalEEMod estimated 0.0000 emissions of NO2. Refer to Table 3 and Attachment D.

The emission results from the annual run of the CalEEMod air modeling program were used as the input data for the calculation of total project GHG emissions using the EPA GHG Equivalencies Online Calculator. As summarized in Table 6 below, the total (annual) GHG emissions for the Project are estimated at 1,045 metric tons per year of GHGs expressed as CO_2 equivalents.

Table 6
Total (annual) Project Greenhouse Gas Emissions
For all Project Emission Sources

Total Daily Emissions	GHG Component (tons/project)
1.3861	CO (tons/project)
389.4615	CO2e (metric tons/project)
0.0744	CH4 (metric tons/project)
2.4026	NOx (tons/project)
1,045	**Total (Annual) GHG Emission expressed as Metric Tons of CO2 Equivalents** for all Off-site Export and Import Haul trucks, Passenger-worker vehicles, delivery trucks, and on-site construction equipment

Notes:
1. Calculated using EPA GHG Equivalencies Calculator for CO, NOx, CO2 and CH4 emissions accessed at: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator
2. The annual emissions estimated from the CalEEMod (i.e., emission run results for each pollutant from annual run) were used to estimate the total project greenhouse gas emissions shown in this summary table.
3. NOx emissions estimated from CalEEMod are used to estimate the GHG emissions in-place of NO2 as CalEEMod estimated 0.0000 emissions of NO2. Refer to Table 3 above.

MBUAPCD has established an annual threshold for GHG emissions of 10,000 metric tons of CO_2 equivalents per year. The project annual (total) emissions are below this threshold as shown in Table 6 (above). Therefore, the project will not generate GHG emissions that will have a significant impact on the environment. Further, the project estimate of GHG emissions presented in Tables 5 and 6 does not take into account the reductions in GHG emissions associated with improved fuel efficiency due to the control measures planned for NOx emissions that were discussed above (in this section) and in Section 3 of this document.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Impact Analysis:
The City of Salinas has not yet adopted a climate action plan. However, the City of Salinas has set a goal to reduce City-wide GHG emissions through the use of best available technologies so that the City can achieve 1990 levels by the year 2020. The project is of temporary nature (18 weeks or 90 days), and estimated GHG emissions are below the MBUAPCD annual threshold as described in item (a) above. Further, the project will employ BMPs and control measures to reduce equipment and vehicle GHG emissions, which are not accounted for in the project estimate of GHG emissions. In addition, the proposed project activities will provide benefits to the community by removing or reducing contamination. It is concluded that project activities will not conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing GHG emissions. All project activities will be performed consistent with MBUAPCD rules and policies.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

References Used:

1. California Air Resources Board (CARB). 2015. California Greenhouse Gas Emissions Inventory – 2015 Edition. available at *http://www.arb.ca.gov/cc/inventory/data/data.htm*, accessed on June 29, 2016.

2. City of Salinas Energy Efficiency Conservation Strategy, Volume I, May 13, 2010, accessed July 7, 2016 at: http://www.ci.salinas.ca.us/pdf/temporary/EECS%20Volume%20I%20%206-15-2010%20FINAL.pdf
3. City of Salinas environmental resources Program, energy Division accessed July 7, 2016 at: http://www.environmentsalinas.com/energy
4. MBUAPCD Guidelines for Implementing California Environmental Quality Control Act, February 8, 2016 accessed June 27, 2016 at: http://mbard.org/wp-content/uploads/2016/03/Attachment_Guidelines-for-Implementing-CEQA.pdf.
5. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.
6. United States Environmental Protection Agency, Overview of Greenhouse Gases at: http://epa.gov/climatechange/ghgemissions/gases/fgases.html

8. Hazards and Hazardous Materials

Project Activities Likely to Create an Impact:

- During excavation activities, there is potential to generate airborne dust contaminated with Site COCs.
- Groundwater and soil vapor monitoring well abandonment activities may generate soil waste of hazardous nature.
- Confirmation soil sampling activities using a drill rig following ISS may generate soil waste of hazardous nature.

Description of Baseline Environmental Conditions:
The project site is currently vacant and unoccupied with the exception of a small unmanned PG&E gas regulator station located in the southeastern part of the Site. The Site is secured with fencing. The proposed project involves localized hot spot excavation to 10 feet below grade in the northern half of the Site within the footprint of the former southern gas holder, loading soil into dump trucks, and off-site disposal combined with treatment by ISS of deeper soil impacts extending to groundwater (35 feet bgs). ISS will use large diameter augers to mix Portland cement into the subsurface and will result in soil swell at the surface. The soil swell will be loaded into dump trucks and disposed off-site similar the soil that is excavated. Soil at the project site is impacted with benzene, ethylbenzene, PAHs, antimony, arsenic, cadmium, lead, mercury, and total petroleum hydrocarbons (TPH) from operations of the former MGP. The proposed remedy also includes institutional controls to prohibit groundwater use.

A 2016 Human Health Risk Assessment (HHRA) was prepared by Iris Environmental for the Site to evaluate potential risks to current and/or future populations that could be exposed to chemicals identified in subsurface soil, soil gas, and groundwater as a result of operation of the former MGP at the Site. The results of the HHRA were used to identify areas of the Site where remediation and/or mitigation measures or other forms of risk management may be appropriate to achieve the overall goal of long-term protection of human health and the environment.

The HHRA concluded that the existing Site surface soil conditions (0-1 feet) are protective of the current off-site commercial worker and current off-site residential populations as well as the occasional on-site intrusive worker, but a form of long-term land use controls are warranted should the Site be redeveloped for commercial or residential uses. Risk-based or ambient-based (background) soil action levels were derived in the HHRA to help identify areas of the Site where remediation is warranted. The identified COCs and their soil action levels under the future residential use scenario that were used to identify areas of the site requiring some form of remediation are summarized in the table below. The project will (1) excavate soils in one localized area of the Site in the vicinity of the former southern gas holder in the north half of the Site where COC levels exceed the soil action levels in the upper 10 feet, and (2) treat soils in-situ throughout the Site using ISS where COC levels exceed the soil action levels and extend to the groundwater table at approximately 35 feet below ground surface.

COCs and Soil Action Levels

Chemical	Action Level (mg/kg)
Benzene	1.3
Ethylbenzene	19
1-methylnaphthalene	4.0
2-methylnaphthalene	209
Naphthalene	3.2
Fluoranthene	2,180
Pyrene	1,629
CPAHs (in Benzo(a)pyrene Equ.)	0.9
Antimony	30
Arsenic	14
Cadmium	5.2
Lead	77
Mercury	12
TPHg	1,650
TPHd	1,213
TPHmo	10,307

The HHRA also includes a screening-level evaluation of COCs present in groundwater. Based on the results of the screening-level evaluation of groundwater, the maximum detected concentration of eleven analytes detected in Site groundwater (i.e., benzene, ethylbenzene, MTBE, toluene, xylenes, TPHd, TPHg, acenaphthene, B(a)P, naphthalene, and arsenic) exceed their respective drinking water criteria (maximum contaminant level [MCL] and/or taste/odor threshold). As a result, the HHRA states current on-Site groundwater conditions are not consistent with the Central Coast Basin Plan objectives, which require groundwater concentrations to be below established MCLs and/or taste and odor thresholds. Accordingly, the HHRA states groundwater at the Site requires some form of mitigation to prevent contact and/or use. Therefore, the proposed remedy includes treatment of deep impacted soils, the establishment of land-use covenants (LUC) for each of the Site parcels following completion of the project to prohibit on-site use of groundwater, and a post-remediation groundwater monitoring plan to evaluate post remediation groundwater conditions for a minimum period of three days.

Analysis as to whether or not project activities would:

a. Create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials.

Impact Analysis:
The proposed implementation of the RAP's remedial activities will involve in-ground treatment and off-site disposal of unearthed impacted soil swell at permitted disposal facilities. During the remedial activities, dust containing COCs will be generated and may be dispersed under windy conditions. The proposed truck route leaving the Site is to travel north on Bridge Street, turn left on East Lake Street, right onto North Main Street to Highway 101. Trucks will then travel north or south on Highway 101 depending on the waste profile and selected disposal facility. All truck beds will be covered with tarps, or bins sealed shut before leaving the Site. All truck tires will be hard scrubbed before exiting. Street sweeping will be conducted in City streets as needed. Implementation of the environmental controls discussed in the RAP (section 6.4) and summarized below will reduce the impacts to a less than significant level.

- The size of areas of disturbed soil and active ISS treatment cells will be kept to a minimum at any one time for the purpose of dust control;
- Soil handling and loading activities will be managed so that adequate dust control measures such as water or foam spray can be easily implemented.
- Water will be applied to areas of excavation as necessary to maintain soils in a damp condition. An appropriate water source and plumbing will be constructed so that an adequate water supply can be provided for multiple activities.

- Stockpiling will be minimized by direct loading and transportation of impacted soils when possible. If necessary, any stockpile of impacted soil or exposed area of disturbed soil left overnight, will be properly covered with plastic to minimize dust emissions.
- Dust levels will be monitored during ISS treatment and soil handling activities along the perimeter of the Site. If monitoring data indicate that dust levels are beyond acceptable thresholds, then additional engineering control measures will be implemented as necessary.
- Proper procedures will be used to assure that wet soil (mud) does not stick to tires of trucks used for soil transportation. The procedure may include placing plastic sheeting at the loading area and rumble strips at the entry/exit gate.
- Plastic sheeting will be used extensively to make sure that the area of excavation and ISS is protected from rain during off hours and sudden heavy rain.
- Routine truck maintenance and repairs will be performed at the contractor's premises prior to picking up loads of waste material from the Site.
- The contractor will be required to cleanup, to the satisfaction of the regulatory agencies involved, any spills resulting from maintenance of the trucks or due to potential road accidents during the field operations.
- All vehicles, trailers, and containers will be inspected on a routine basis.
- During loading, dust and odor emissions will be monitored and mitigated as necessary. Care will be exercised to prevent spillage of soil during loading, and to prevent the dispersion of dust.
- Trucks will be equipped with covers to prevent the release of potential dust and emissions during staging and transport.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Impact Analysis:
The RAP includes best management practices (BMPs) designed to ensure that the potential for accidents and releases of pollutants are minimized to the greatest extent possible. The RAP BMPs will include the following items as outlined in the RAP:

- An Emergency Spill Contingency Plan (ESCP, a uniform reporting procedure) will be prepared by the contractor to ensure that all drivers and dispatchers know their responsibilities in the unlikely event that an accident occurs during loading or while transporting impacted material. The drivers, dispatchers, managers, and emergency response personnel will be required to know the procedures for emergency spill response.
- On-site spills will be addressed a Health and Safety Plan (HASP). The Health and Safety Plan (HASP) will be prepared in accordance with current health and safety standards as specified by the Federal and California OSHA and submitted to the DTSC for approval prior to initiation of fieldwork. The provisions of the HASP are mandatory and will be reviewed and signed by all personnel before working at the Site.
- The Site will be fenced during the remediation activities to prevent public access.
- The Site will have PG&E representatives present during working hours.
- A private security firm may be contracted to provide Site and equipment security during non-working hours.
- The weather forecast will be monitored very closely. During the days heavy rain is forecast, remediation activities will be suspended.

- The boundary of the remediation area will be properly bermed so that no run-on enters the work area and no runoff leaves the work area.

- Water collected within the work area will be pumped and stored in appropriate containers for proper profiling and disposal at an approved destination.

- Plastic sheeting will be used extensively to make sure that exposed soil in the work areas is protected from rain during off hours and sudden heavy rain.

All contractors will be responsible for operating in accordance with the most current Federal and California Occupational and Safety Health Administration (OSHA) regulations, including Hazardous Waste Operations and Emergency Response, General and Construction Safety Orders, and the Federal and Construction Industry Standards as described in California Code Regulations, Title 8, Sections 1539, 1541, and 5192 and 29 Code of Federal Regulations 1910.120, and 1926.

An Environmental Control and Monitoring Plan (ECMP) will be prepared in accordance with applicable MBUAPCD, City of Salinas, Monterey County, and DTSC regulations. This plan will serve to provide further protection of the community from the proposed project. The ECMP will outline mandatory dust control measures, real-time monitoring of dust and VOCs during excavation with comparison against site-specific action levels, and collection and analysis of perimeter air samples for the Site COCs with comparison of data against site-specific risk-based action levels to ensure protection of the community. If at any time the data from the real-time or perimeter air samples exceed the action levels, work will be stopped, and additional engineering controls implemented before excavation can resume. Further, risked-based action levels will be established to ensure protection of the community.

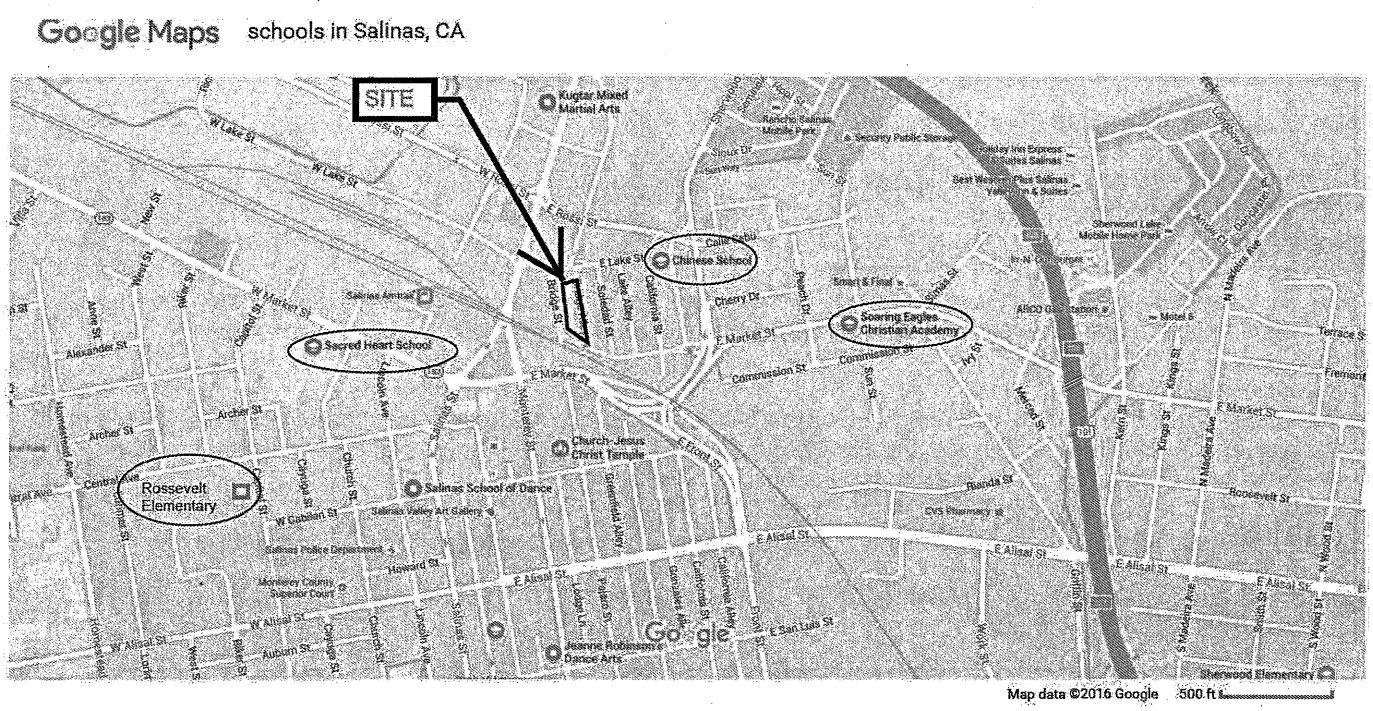
Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.

Impact Analysis:
There are four schools located within approximately 1/8- to ½-mile of the Site. These schools include:

(1) Salinas Chinese School, a mandarin Chinese linguistic and cultural education school, located approximately 0.125-mile northeast of the Site;
(2) Sacred Heart School, a private elementary school, located approximately 0.25 mile southwest of the Site;
(3) Soaring Eagles Christian Academy, a private elementary school, located 0.4 mile east of the Site; and,
(4) Roosevelt Elementary School, a public elementary school, located 0.5 mile southwest of the Site.

A map showing the location of schools in the Site vicinity is provided below. By implementing the dust control BMPs described in the RAP (listed below the school map) and the ECMP, which will be prepared during the remedial design phase of the project, potential impacts associated with hazardous emissions would be reduced to a less than significant level.



To prevent the release of hazardous materials (dust that may contain COCs released from excavated soil) to the environment, BMPs for dust control measures described below will be implemented to control these potential releases.

- The size of open excavations will be kept to a minimum at any one time for the purpose of dust control;
- Excavation and loading activities will be managed so that adequate dust control measures such as water or foam spray can be easily implemented.
- An appropriate water source will be secured so that an adequate water supply can be provided for multiple activities. The water source may include a water truck, on-site temporary water tank, or other sources approved by the City of Salinas.
- Stockpiling will be minimized by routine loading and transportation of impacted soils. If necessary, any stockpile of impacted soil or exposed excavation left overnight, will be properly covered with plastic to minimize dust emissions.
- Airborne dust levels will be monitored during excavation activities along the perimeter of the Site. If monitoring data indicate that dust levels are beyond acceptable thresholds, then engineering control measures will be implemented as necessary.
- Soil excavation activities will be phased to reduce the total area of exposed and disturbed soils at any one time.
- Earth-handling activities will be halted during periods of high winds (15 mph or greater) and all dust generating sources will be immediately watered, covered, and secured with plastic sheeting until conditions improve.
- Equipment idle time will be minimized to 5 minutes or less.
- On-site movement of vehicles and equipment will be limited to "crawl" speeds (i.e. 5 miles per hour).
- On-site vehicles and equipment will be restricted to designated haul paths on paved and/or undisturbed areas to the extent possible.
- All exposed surfaces (e.g., staging areas, soil stockpiles, excavation walls, graded areas, and unpaved access roads) will be moistened periodically as needed.
- All haul trucks transporting soil, sand, or other loose materials off-site will be cleaned (brushed or washed) and covered before leaving the Site.
- All visible mud or dirt tracked out onto adjacent public roads will be removed.

As previously discussed above, a HASP and ESCP will be prepared during the remedial design and will address the handling of on-site and off-site spills, and to ensure that all drivers and dispatchers know their responsibilities in the unlikely event that an accident occurs during loading or while transporting impacted soil material to the off-site facility. The drivers, dispatchers, managers, and emergency response personnel will be required to know the procedures for emergency spill response. The ESCP will be prepared to meet or exceed all federal, state, and county regulations

currently in effect. The provisions of the ESCP will be strictly adhered to in order to ensure continued protection of the public safety and the environment.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to public or the environment.

Impact Analysis:
The Site is not on the Section 65962.5 list (Cortese List) of hazardous materials sites affiliated with the California Department of Toxic Substances Control. Soil remedial activities and post-remediation groundwater monitoring are designed to reduce or eliminate hazards to the public and the environment.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Impact Analysis:
The RAP activities will not impair or interfere with any emergency response plan or emergency evacuation plan. The project will adhere to a site-specific HASP, which will include details related to evacuation procedures and meeting place in the event of an emergency. Also, the project will adhere to a site-specific ESCP that will provide procedures in the event a release/spill associated with the project occurs on-site or off-site during material loading and transport to an off-site disposal facility.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

References Used:
1. California Environmental Protection Agency's Cortese List Data Resources accessed June 30, 2016 at: http://www.calepa.ca.gov/SiteCleanup/CorteseList/.
2. City of Salinas School District List available at City of Salinas website under resident services, education accessed on June 20, 2016 at: http://www.ci.salinas.ca.us/residents/residents.cfm
3. Department of Toxic Substances Control's Hazardous Waste and Substances Sites (Cortese List) accessed June 30, 2016 at: http://www.calepa.ca.gov/sitecleanup/corteselist/SectionA.htm.
4. Google Maps Application, search for schools within city of Salinas limits, and Google Earth Mapping Application, Places Category, Schools Layer.
5. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.
6. Water Quality Control Plan for the Central Coast Basin, March 2016 edition, accessed on June 29, 2016 at: http://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/current_version/2016_basin_plan_r3_complete.pdf

9. Hydrology and Water Quality

Project Activities Likely to Create an Impact:
- Surface disturbing activities may mobilize soil with COCs.
- Soils may move off-site during storm events as storm water runoff.
- Groundwater monitoring well and soil vapor well abandonment.

- Confirmation soil sampling following completion of ISS treatment.
- Groundwater and soil vapor well installation following completion of the remediation

Description of Baseline Environmental Conditions:
The project site is a relatively flat lot that slopes generally to the northeast, with the exception of the southern end of the Site that slopes to the south toward Market Way. Elevations at the Site range from a high of 53 feet above mean sea level (MSL) to a low of 49 feet above MSL. Stormwater from the Site drains via sheet flow into City-owned storm drains that connect to underground stormwater pipelines in Bridget Street. The City-owned underground stormwater pipelines convey stormwater northward in Bridge Street to an outfall that discharges into the Salinas Reclamation ditch (main canal).

There are no water bodies located in the immediate Site vicinity. Creeks and lake beds located within the City of Salinas with the exception of the Salinas River are dry during most of the year and serve as open space. Four natural channels (creeks) flow from the Galiban Mountains located to the west into the City of Salinas and converge at Carr Lake. A seasonal lake located in the center of the City of Salinas. From Carr Lake flows the main channel of the Monterey County Water Resources Agency (MCWRA) Reclamation ditch 1665 (Salinas Reclamation ditch/main canal), which is situated approximately 1,726 feet (0.3 mile) to the north of the project site. The Salinas Reclamation ditch serves as the primary drainage way for the City of Salinas. Urban runoff from the City of Salinas drains via underground piping and a series of channels into the Salinas Reclamation Ditch via numerous stormwater outfalls. The Salinas Reclamation ditch flows to the northwest ultimately discharging at Moss Landing Harbor in Monterey at the Pacific Ocean. The project site is not located in the 100-year flood zone of the Salinas Reclamation Ditch according to the City of Salina General Plan.

The project site is located within the 180/400-Foot Aquifer Sub-basin of the Salinas Valley. The 180/400-Foot Aquifer Sub-basin contains two main water-bearing units – the 180-Foot Aquifer and the 400-Foot Aquifer – so named for the average depth at which they occur. A deeper aquifer, referred to as the 900-Foot Aquifer or the Deep Aquifer, occurs in the lower Salinas Valley. The 180-Foot Aquifer is separated from the 400-Foot Aquifer by a zone of discontinuous aquifers and aquitards ranging in thickness from 10 to 70 feet. Drinking water is provided to the City of Salinas from two water services; Alco Water Service and California Water Service Company. Each obtain drinking water from high-quality ground water pumped from deep wells.

The depth to groundwater observed in the Site monitoring wells ranges from approximately 31 to 42 feet below ground surface. Historically, groundwater-level fluctuations of up to 26 feet below ground surface have been observed. The general groundwater flow direction in the shallow groundwater zone has typically been to the southeast.

Analysis as to whether or not project activities would:

a. Violate any water quality standards or waste discharge requirements.

Impact Analysis:
The proposed project will not violate any water quality standards or waste discharge requirements. The boundaries of the remediation areas will be properly bermed and BMPs will be implemented during construction to ensure that erosion and/or waste do not leave the Site. These BMPs will include gravel bag berms, silt fence, or similar installed along the downgradient edges of work, around the perimeter of catch basins, along the base of stockpiles, and along the top of excavation slopes. Further, trucks beds and/or soil bins will be covered prior to leaving the Site, and all vehicles and equipment will be cleaned of loose soil prior to exiting the Site. Standard storm water control measures and associated BMPs to control releases of non-point source water pollutants from materials and waste storage areas, vehicle fueling areas, vehicle parking areas, and related will be implemented in accordance with City and State regulations, as appropriate, and as outlined in the design plans, ECMP, and storm water control plans to be prepared for the project during the remedial design phase.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

Impact Analysis:
The proposed remediation project will not deplete groundwater supplies or interfere with groundwater recharge. No groundwater extraction wells will be installed as part of the project. Water used for construction purposes will be limited due to the size of the Site, limits of proposed excavation area, and the short-term duration of the project. Water used for construction purposes will be supplied from municipal sources. The project will not impact groundwater recharge as groundwater will not be removed or added to the subsurface as part of the project.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site.

Impact Analysis:
The project will not alter the existing drainage pattern of the Site or area and will not result in substantial erosion or siltation. The ISS treatment areas will be restored to their original grade and drainage patterns at the end of the project, therefore not resulting in a change to the drainage pattern at the Site or its vicinity. During remediation, BMPs will be implemented to limit erosion and prevent the release of impacted water to off-site areas. These BMPs will include the following, as outlined in the RAP and to be outlined in the site-specific ECMP and storm water plans prepared during the remedial design.

- The weather forecast will be monitored very closely. During the days heavy rain is forecast, remediation activities will be suspended.
- The boundary of the remediation area will be properly bermed so that no run-on enters the work area and no runoff leaves the work area.
- Water collected within the work area will be pumped and stored in appropriate containers for proper profiling and disposal at an approved destination.
- Proper procedures will be used to assure that wet soil (mud) does not stick to tires of trucks used for soil transportation. The procedure may include placing plastic sheeting at the loading area and rumble strips at the entry/exit gate.
- Plastic sheeting will be used extensively to make sure that the area of excavation and ISS is protected from rain during off hours and sudden heavy rain.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site.

Impact Analysis:
The proposed project will not alter the existing drainage pattern of the area, nor alter the course of a stream or river, or increase the rate or amount of surface runoff that would result in flooding on or off-site. The Site topography is relatively flat, and the existing topography and drainage patterns will be observed and restored at the conclusion of the project.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated

☒ Less Than Significant Impact
☐ No Impact

e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

Impact Analysis:
The project will not discharge water into local drainage systems, and the amount of water used for on-site dust suppression during the project is negligible compared to the absorptive capacity of soil. Additionally, storm water BMPs will be implemented during construction and will include berms and/or straw wattles or similar to control runoff as necessary in addition to the following BMPs outlined in the RAP:

- The weather forecast will be monitored very closely. During the days heavy rain is forecast, remediation activities will be suspended.
- The boundary of the remediation area will be properly bermed so that no run-on enters the work area and no runoff leaves the work area.
- Water collected within the work area will be pumped and stored in appropriate containers for proper profiling and disposal at an approved destination.
- Proper procedures will be used to assure that wet soil (mud) does not stick to tires of trucks used for soil transportation. The procedure may include placing plastic sheeting at the loading area and rumble strips at the entry/exit gate.
- Plastic sheeting will be used extensively to make sure that the area of excavation and ISS is protected from rain during off hours and sudden heavy rain.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Otherwise substantially degrade water quality.

Impact Analysis:
The remediation activities will not contribute to point-source or non-point-source pollutants. In addition, treatment of impacted soil by ISS will serve to improve water quality by containing/binding constituents of concern in a Portland cement-water mixture thereby preventing them from entering groundwater and degrading water quality.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

g. Place within a 100-flood hazard area structures which would impede or redirect flood flows.

Impact Analysis:
The proposed project does not involve the construction of any structures which would impede or redirect flood flows.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

h. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

Impact Analysis:
The project is not located within a 100-year flood plain. The closest water body to the Site is the MCWRA Reclamation ditch 1665 located 0.3 mile to the north. No structures will be constructed as part of the project and the presence of construction workers at the Site will be limited to the approximate 18-week (90 day) construction period. The project will not expose people or structures to a significant risk of loss, injury or death as a result of flooding.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

i. Inundation by sieche, tsunami or mudflow.

Impact Analysis:
The project is located in downtown Salinas at an elevation of approximately 49 to 53 feet above mean sea level and therefore, would not be subject to inundation by seiche or tsunami.

Mudflows are a type of mass wasting or landslide, where earth and surface materials are rapidly transported downhill under the force of gravity. Mudflow events are caused by a combination of factors, including soil type, precipitation, and slope. Mudflows may be triggered by heavy rainfall if the soil is not able to sufficiently drain or absorb. Although mudflows can occur in arid areas, the flatness of the topography in the area around the Site precludes mudflow events.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

1. California Department of Water Resources (CDWR), California's groundwater: CDWR, Bulletin 118 – Update 2003, October 2003, 246 p.
2. California Department of Water Resources (CDWR), California's groundwater: CDWR Bulletin 118, Individual basin descriptions website at: http://www.dpla2.water.ca.gov/publications/groundwater/bulletin118/basins/pdfs_desc/3-9.pdf, last update on February 27, 2004.
3. Central Coast Watershed Studies Final Report: Monterey County Water Resources Agency – Reclamation Ditch Watershed Assessment and Management Strategy, Part A; Watershed Assessment, March 2015, accessed on June 30, 2016 at: http://www.mcwra.co.monterey.ca.us/documents/documents/Final_Rec_Ditch_Report.pdf
4. City of Salinas General Plan, September 2002, Safety Element, pages 309 – 312 accessed on June 28, 2016 at: http://www.ci.salinas.ca.us/services/commdev/generalplan.cfm.
5. City of Salinas Stormwater Management Update, submitted July 2, 2013, accessed July 5, 2016 at: http://www.environmentsalinas.com/sites/default/files/pdf/Stormwater_Management_Plan_Update_Salinas.pdf
6. City of Salinas Stormwater Master Plan, prepared by CDM, May 2004, accessed on July 5, 2016 at: http://www.ci.salinas.ca.us/services/engineering/pdf/salinas_storm_water_master_plan.pdf.
7. Google Maps Application, Search for waterways within City of Salinas limits.
8. PG&E Salinas Manufactured Gas Plant Site Survey, topographic survey of project site, drawing number Z-1054, dated July 25, 2012 and last updated October 8, 2012. Available at TPG and PG&E offices.
9. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.

10. Land Use and Planning

Project Activities Likely to Create an Impact:
NONE. The proposed project does not involve activities that would require a change in zoning or designated land uses. For this reason, no further analysis of impact to this resource category is deemed necessary.

Description of Baseline Environmental Conditions:

Analysis as to whether or not project activities would:

a. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Conflict with any applicable habitat conservation plan or natural community conservation plan.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:
1. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.

11. Mineral Resources

Project Activities Likely to Create an Impact:
NONE. No mineral resources are known to exist at the Site. Therefore, no impacts to mineral resources would occur. For this reason, no further analysis of impact to this resource category is deemed necessary.

Description of Baseline Environmental Conditions:

Analysis as to whether or not project activities would:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact

☒ No Impact

References Used:

1. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.

12. Noise

Project Activities Likely to Create an Impact:

- Demolition of existing pavement and concrete foundations using heavy construction equipment, and demolition of groundwater and soil gas wells using a drill rig.
- Demolition of in-ground former structures that impede the ISS equipment during ISS treatment.
- ISS treatment of impacted soils in-ground by mixing binding agents consisting of Portland cement and water into the subsurface using a drill rig and/or excavator with mixing tool attachment. The binding agents will be blended in a batch plant prior to adding to the ground.
- Loading of impacted soil unearthed as swell from ISS and debris onto dump trucks, unloading imported Portland cement l, crushed rock, and/or paving (if conducted) at end of the project.
- Transportation of impacted soil and debris to appropriate off-site permitted disposal facilities.
- Transportation of import materials (Portland cement, crushed rock, paving materials) from off-site locations and placement at the Site.
- Transportation of other supplies to the Site.
- Collection of confirmation soil samples following the completion of ISS using a drill rig.
- Placement of pavement and/or crushed rock using heavy construction equipment to restore the site to existing grades.
- Installation of post-remediation groundwater monitoring wells and soil vapor wells using a drill rig.

Description of Baseline Environmental Conditions:
The area of the Site is zoned MAF for mixed arterial frontage. The Site is surrounded by mixed-use and commercial zoning. The closest sensitive receptors to the project consist of residential areas comprised of an apartment building located directly east of the Site across Bridge Alley, and several apartment buildings located approximately 250 feet north of the Site across Universal Auto Repair and East Lake Street (Attachment B- Figure 2).

According to the City of Salinas 2002 General Plan Noise Element, noise from transportation activity is the primary source of noise in the City. The four major sources of transportation noise are defined as:

- Traffic on highway 101, 68, and 183.
- Traffic on major arterial roadways within the City.
- Train movement on the Union Pacific Railroad line.
- Flight activity at the Salinas Municipal Airport.

Because it is difficult to directly control the noise produced by transportation sources, the City of Salinas 2002 General Plan Nosie Element focuses on reducing noise impacts at the receptors. Site planning, landscaping, topography, and the design and construction of noise barriers are the most common method of reducing noise from transportation activity. Setbacks and buffers can also be used to achieve noise reductions at the receptors.

Non-transportation related noise such as noise from commercial and industrial centers, agricultural activities, restaurants, bars, and similar must also be controlled. These noise sources are referred to in the General Plan as nuisance noises, which are controlled through the enforcement of the City of Salinas Noise Ordinance described below. The City of Salinas 2002 General Plan Noise Element identifies allowable exterior maximum noise levels which are presented in the following table (Table N-2). The General Plan requires all construction activity comply with the noise limits presented below in Table N-2.

Table N-2
Exterior Noise Standards

Designation/District of Property Receiving Noise	Maximum Noise Level, Ldn or CNEL, dBA
Agricultural	70
Residential	60
Commercial	65
Industrial	70
Public and Semipublic	60

According to the City of Salinas Police Department and Section 21A of the City of Salinas Municipal Code Noise Regulation (City Noise Regulation), noise is divided into four classes designated as Class A through Class D. The City Noise Regulation identifies the general hours of the day where each class of noise is/is not permitted. These classes of noise and the allowable hours are described below. The proposed project would fall under Class A Noise described as follows:

- **Class A Noise** is defined as noise created by and emanating from equipment operated in the public interest or for emergency or safety purposes. Such equipment includes, but is not limited to, sirens, street sweepers, spray rigs, garbage trucks, chipper machines, or public utility equipment. Class A noise is allowed at any time.
- **Class B Noise** is defined as noise created or generated within or adjacent to residential property, which is normally associated with residential living. Class B noise includes, but is not limited to, noise created by power mowers, trimmers, home appliances, home workshops, vehicle repairs and testing, and home construction projects. Class B noise is not allowed between 9:00 p.m.- 7:00 a.m.
- **Class C Noise** is defined as noise made by motorized or mechanical equipment or devices used in sporting, recreational, and hobby activities. Class C noise includes, but is not limited to, motor-equipped mini-bikes, go-carts, motorcycles operating off public rights-of-way, drag races, model planes and cars. Class C noise is not allowed between 9:00 p.m.-7:00 a.m. Class C noise must be made at such a distance away from a residential area so that residents will not be unreasonably disturbed by the noise of the equipment or devices.
- **Class D Noise** is defined as noise that is unnecessary, unnatural or unusual noises or sounds created by means of human voice or animal outcry, or by any other means or methods which are so annoying, or which are so harsh or prolonged, as to be injurious to the health, peace and comfort of any reasonable person of normal sensitiveness residing in the area. Class D noise is not permitted at any time.

The creation and emission of Class A noise as defined in the City Noise Regulation (Section 21A of the City of Salinas Municipal Code) are exempt from the provisions of the City Noise Regulation. Because the project is temporary (90-days/18 weeks duration, 5 days per week (Monday through Friday) between the hours of 7 am and 7 pm when construction work is planned), the project is also exempt from the City Performance Standards maximum noise level for mixed use districts of 65 dBA. However, noise levels will be monitored at the project Site boundary during construction, and sustained noise levels at the project Site boundary will be limited to 80 dBA, and the use of mechanical construction equipment will be limited to the hours of 7 am to 7 pm.

Analysis as to whether or not project activities would result in:

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Impact Analysis:
Implementation of the remediation project may result in temporary increases in noise levels associated with the operation of heavy equipment. These include earthmoving equipment (i.e. excavator, backhoe, and front-end loader), operation of the ISS batch plant, and transportation of soils and ISS materials during the remediation project. All construction equipment used for the remediation project will be of newer models (2010) and equipped with mufflers or sound attenuating devices. Work will be confined to weekdays from 7:00 am to 7:00 pm with City approval during the remedial design and permitting phase.

Because the nearest sensitive receptors, an apartment building located directly east of the project site across Bridge Alley and Universal Auto Repair located adjacent to the Site's north property boundary followed by several apartment buildings located across East Lake Street approximately 250 feet north of the project site (Attachment B- Figure 2), are situated in proximity to the Site, noise levels will be monitored along the perimeter of the Site during the remediation activities using a noise-level meter. Because the project falls under the category for Class A noise and is temporary (90-days/18 weeks duration), the project is exempt from the City of Salinas Noise Regulation and the City of Salinas Performance Standards for maximum noise level. However, to ensure the project is not a noise nuisance for neighboring properties and near-by sensitive receptors, if monitoring of noise at the Site property line indicates noise levels associated with the project are above 80 dBA between the hours of 7 am and 7 pm when construction work is planned, then appropriate engineering controls to reduce noise levels will be implemented. These engineering controls may include one or more of the following depending on the level of nuisance noise:

- The operating speed of the equipment may be reduced.
- Mufflers may be used on equipment.
- Sound barriers may be installed along the east and/or north property boundary to deflect sound from sensitive areas.
- Alternate equipment may be considered.
- Operational sequences may be modified so that equipment operation is staggered.

Public complaints will be addressed by either the PG&E project manager, who will be on-site during working hours, or the DTSC project manager. Project manager contact information will also be posted on signs on the outside of the construction fence.

Hearing protection will be provided to all exposed workers and access to the Site will be controlled. Noise levels and worker protection within the exclusion zone of project activities will adhere to OSHA health and safety standards and the site-specific HASP that will be prepared prior to project start-up.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels.

Impact Analysis:
Heavy construction equipment can produce vibration levels at 25 feet from the sources ranging from a low of 0.003 PPV (peak particle acceleration) for a small bulldozer to 0.210 PPV for a vibratory roller. Construction-related activities could potentially lead to ground-borne vibrations that could impact nearby structures due to ground attenuation/movement that could cause foundation cracks to the nearby structures. Vibration impacts associated with the project are expected to be minimal as backfill and compaction is not an element of the proposed plan, and therefore vibratory rollers will not likely be used. Minor grading within the ISS treatment area will be conducted to rough grade the surface for the finished surface completion consisting of pavement/concrete and/or the placement of crushed rock. Vibration monitoring will be conducted at nearby structures to ensure ground attenuation of nearby structures resulting from vibrations associated with construction equipment does not occur. Remediation activities will use low-impact construction technologies and avoid the use of vibrating compaction equipment where possible to limit construction-related vibrations.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

c. A substantial permanent increase in ambient noise levels in the vicinity above levels existing without the project.

Impact Analysis:
The project is temporary and will take approximately 18-weeks (90 days) to complete. Therefore, there will not be any permanent increase in ambient noise levels.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact Analysis:
Temporary noise will be generated from the project typically between the hours of 7am and 7pm five days per week (Monday through Friday). Noise levels will be monitored at the Site property line during construction activities and mitigating measures consisting of one or more of the following engineering controls depending on the level of nuisance noise will be implemented as needed to ensure project noise levels are not sustained above 80 dBA during all project-related construction activities.

- The operating speed of the equipment may be reduced.
- Mufflers may be used on equipment.
- Sound barriers may be installed along the east and/or north property boundary to deflect sound from sensitive areas.
- Alternate equipment may be considered.
- Operational sequences may be modified so that equipment operation is staggered.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

References Used:
1. City of Salinas General Plan, September 2002, Noise Element, PDF pages 339 – 351 accessed on June 30, 2016 at: http://www.ci.salinas.ca.us/services/commdev/generalplan.cfm.
2. City of Salinas Municipal Code CHAPTER 21A. - NOISE REGULATION. accessed on June 30, 2016 at: https://www.municode.com/library/ca/salinas/codes/code_of_ordinances?nodeId=PTIITHCO_CH21ANORE
3. City of Salinas Municipal Code CHAPTER 37 Zoning – Article 5- Division 1 - Section 37-50.180 Performance Standards accessed on June 30, 2016 at: https://www.municode.com/library/ca/salinas/codes/code_of_ordinances?nodeId=PTIITHCO_CH37ZO_ARTVSUREAPALDI_DIV1SPREAPALDI_S37-50.180PEST
4. City of Salinas Police Department Frequently Asked Question Noise Complaints accessed June 30, 2016 at: https://www.salinaspd.com/content/noise-complaints
5. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.

13. Population and Housing

Project Activities Likely to Create an Impact:
NONE. The proposed project does not involve activities that would require a change in population or housing. No housing structures exist on-site currently, and none will be constructed on-site as part of the project. The project does not include redevelopment or construction of new infrastructure that would indirectly affect populations at the Site or vicinity. The area population and housing will not be impacted because the remediation project is temporary in nature. The project will use local workers wherever possible and temporary out-of-town workers will be housed in motels and/or hotels until the remediation activities are completed. Following remediation, the project site will be in its current/pre-remediation condition. Therefore, no further analysis of impact to this resource category is deemed necessary.

Description of Baseline Environmental Conditions:

Analysis as to whether or not project activities would:

a. Induce substantial population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:
1. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.

14. Public Services

Project Activities Likely to Create an Impact:
NONE. The proposed project does not involve activities that would affect public services.

Description of Baseline Environmental Conditions:
The area of the Site is zoned MAF for mixed arterial frontage. The Site is surrounded by mixed-use and commercial zoning. The nearest public services to the Site include:

- The Salinas Fire Department is located approximately 2,044 feet southwest of the Site.
- The Salinas Police Department is located approximately 1,850 feet southwest of the Site.
- Bataan Park is located approximately 432 feet southwest of the Site.
- Salinas Amtrak station is located approximately 945 feet west of the Site.
- Dorothy's Place, a full-service volunteer-based care center primarily for the homeless community, is located just east of the Site across Bridge Alley.
- The closest schools are located 0.125-mile northeast of the Site (Salinas Chinese School) and 0.25-mile southwest of the Site (Sacred Heart School, a private elementary school). The closet public school to the Site is Roosevelt Elementary School located 0.5-mile southwest of the Site.

Analysis as to whether or not project activities would:

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant

environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

- ❖ Fire protection
- ❖ Police protection
- ❖ Schools
- ❖ Parks
- ❖ Other public facilities

Impact Analysis:
The proposed remedial action is temporary (duration of 18-weeks/90 days) and will not result in the construction or physical alteration of governmental facilities, nor will it impact any public services. The project is fairly small and would not negatively impact emergency personnel should an emergency arise.

Implementation of the proposed project involves temporary use of construction equipment and workers trained to handle hazardous waste. The project is expected to last 18-weeks/90days. The work area will be fenced to restrict access to the Site, and strict health and safety measures will be implemented as outlined in the Health and Safety portion of the RAP. A private security firm may be contracted to provide Site and equipment security during non-working hours. Therefore, no additional fire or police protection other than that currently offered by the City of Salinas will be required.

Appropriate procedures will be in place to protect underground utility lines to prevent disruption of public utility service. Refer to Section 17: Utilities and Service Systems.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:
1. City of Salinas School District List available at City of Salinas website under resident services, education accessed on June 20, 2016 at: http://www.ci.salinas.ca.us/residents/residents.cfm
2. Google Maps Application, search for police department, parks, fire stations, and other public services within proximity to the Site address 2 Bridge Street, Salinas.
3. Google Maps Application, search for schools within City of Salinas limits, and Google Earth Mapping Application, Places Category, Schools Layer.
4. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.

15. Recreation

Project Activities Likely to Create an Impact:
NONE. The project does not include any activities that would affect recreation or recreation resources.

Description of Baseline Environmental Conditions:
The project involves temporary construction activities involving well removals, well installations in-ground treatment using ISS, and site restoration to its existing grade. Recreation facilities will not be constructed or altered as part of the project as there are no recreation facilities such as parks located on-site or in its immediate vicinity. Out of town workers may use existing recreational facilities during the short-term approximate 7-month project. However, project staff staying locally should not exceed 10 persons at any one time. Therefore, no substantial physical deterioration of recreation facilities would occur or be accelerated as a result of the project.

Analysis as to whether or not project activities would:

a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Impact Analysis:
The temporary remediation project activities will not result in an increase in the existing employee workforce in the City of Salinas. Remediation workers will be temporarily housed in nearby motels or hotels. Consequently, there would not be an increase in the use of or deterioration to any neighborhoods, regional parks, or other recreational facilities.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impact Analysis:
No recreational facilities will be constructed or expanded. Remediation employees/workers will be temporarily staying in nearby motels and/or hotels on an intermittent basis until the project is completed.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:
1. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.

16. Transportation and Traffic

Project Activities Likely to Create an Impact:
- Transportation of impacted soil and debris/demolition waste to appropriate off-site permitted disposal facilities in haul trucks.
- Transportation of finished surface materials (i.e. crushed rock) from off-site locations onto the Site in haul trucks.
- Transportation of project workers to the Site in personal vehicles.
- Transportation of supplies and equipment to the Site in haul trucks and smaller "box" style trucks.
- Transportation of ISS materials (Portland cement) to the Site in haul trucks and/or smaller "box" style trucks.

Description of Baseline Environmental Conditions:
Streets throughout the City of Salinas have been designated with Levels of Service (LOS) A through F, where LOS A indicates free flow conditions with little to no delay, and LOS F indicates high level of delay with severe congestion. LOS C indicates moderate delay. LOS D indicates marginally acceptable traffic operation in urban areas. LOS E is the theoretical capacity of the street. The 2002 City of Salinas General Plan has adopted a policy to achieve LOS D or better for all intersections and roadways throughout the City. According to the 2002 General Plan, a number of roadways in the City currently operate at LOS D, and are projected to reach unacceptable levels of service in the future. These roadways include: West Laurel Drive immediately east and west of highway 101, East Laurel Drive between Natividad Road and Constitution Boulevard, East Market Street east of Montgomery Street, East Market Street east of Highway 101, and Highway 101 north of Boronda Road. Several other streets throughout the City are identified in the 2002 General Plan as operating at LOS E or F. These streets include: Abbott Street, Blanco Road, East Boronda Road, Davis Road, John Street, Laurel Drive, and North Main Street. To improve the LOS on these streets, the City plans to implement capacity improvements including road widening to add in additional travel lanes, add left turn channelization, lengthen the green signal time, add capacity to side-street approaches, and coordinate traffic signals. Additionally, the City plans to implement policies to reduce traffic demand such as creating pedestrian and bicycle facilities, improving city-wide bus service, and adding train service for commuters throughout the City.

The City requires a transportation permit and the use of approved haul routes for oversized truckloads traveling within the City limits. Trucks for this project will be of standard load/weight and will not require a transportation permit. Haul trucks transporting clean fill import or impacted soil export will access/egress the project site at Bridge Street and travel on local

streets to/from Highway 101. The proposed local haul route to/from the project site to Highway 101 has been selected to reduce travel on local roadways to the extent possible.

As presented in the RAP Section 6.3.5, the proposed local haul truck route to/from the Site to/from Highway 101 involves travel on sections of the following local roads as shown in the below image (source: Google maps):

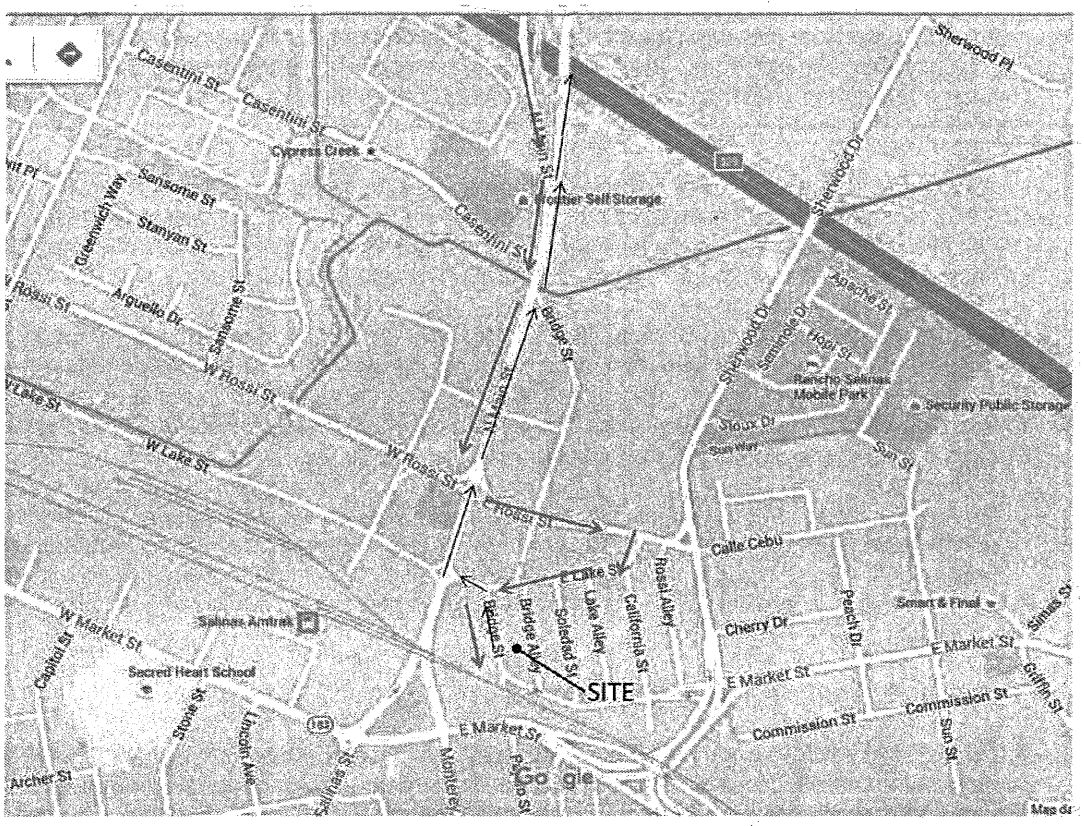
-North Main Street

-East Rossi Street

-California Street

-East Lake Street

-Bridge Street



The section of North Main Street proposed for use to support the project between Rossi Street and Highway 101 is currently at LOS F during peak hours. All other roadways proposed for use during the project are rated at LOS D or better during peak hours. According to the report *Final Supplement for the Salinas General Plan Final Program EIR, dated November 2007,* the segment of North Main Street located between Rossi Street and Highway 101, a 4-lane divided arterial roadway (as of 2007) operates with an average two-way daily traffic count of 39,500 vehicles, which exceeds the LOS D capacity of 32,500 and the LOS E capacity of 36,000 as defined in the 2002 City of Salinas General Plan. This section of North Main Street is therefore classified with LOS F indicating high level of delay with severe congestion during peak hours. The projected year 2030 average two-way daily traffic count for this segment of street is 44,100, which meets LOS F for peak hours. This projection assumes no changes/improvements are made to this section of North Main Street to relieve the traffic congestion as discussed in the 2002 General Plan. However, the City of Salinas proposes to reduce the LOS on this section of North Main Street by adding a third travel lane for both northbound and southbound traffic, which will increase this section of roadway from a total of 4 to 6 lanes and achieve LOS D during peak hours by 2030. Additionally, within the vicinity of the project the City proposes to widen the entire stretch of Highway 101 from four to six lanes of traffic throughout the City limit and widen the section of East Rossi Street between Sherwood Drive and North Main Street.

Analysis as to whether or not project activities would:

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).

Impact Analysis:
Except for project-related traffic along streets adjacent to the Site, most traffic associated with the remediation project will be on the Site itself. Trucks will make trips daily to appropriate off-site disposal facilities and will exit the Site via surface streets (Bridge Street - East Lake Street - North Main Street) to Highway 101, then travel either north or south on Highway 101 depending on the designated disposal site. Trucks entering the Site with clean backfill, paving materials, equipment, supplies, and/or ISS materials will exit Highway 101 at North Main Street, and travel on surface streets (North Main Street - East Rossi Street -California Street -East Lake Street - Bridge Street) to access the Site. As mentioned, all streets

proposed for use to support the project currently meet or exceed LOS D with the exception of the section of North Main Street between Rossi Street and Highway 101 that is rated with LOS F during peak hours.

Estimated project traffic may include the following:

- Up to 5 truckloads per day of soil export from ISS activities. Approximately 4,308 cubic yards (6,462 tons) of impacted soil from ISS swell generated from the mixing of ISS binder material (Portland cement and water) into the subsurface will be transported from the Site on local streets to Highway 101. The project is estimated to result in an average total net increase of approximately 294 truckloads of impacted soil from ISS activities to be hauled off-site over the 65-day (13 weeks) ISS phase of the project.

- Up to 2 truckloads per day of Portland cement import for treatment of the subsurface using ISS. Approximately 1,982 tons of Portland cement will be transported to the Site on local streets from Highway 101. The project is estimated to result in an average total net increase of approximately 99 truckloads of Portland cement to be hauled to the Site over the 65-day (13 weeks) ISS phase of the project.

- Up to 8 truckloads per day of demolition waste including removed pavement, removed concrete from the former building foundation, and removed subsurface concrete from former structures will be hauled from the Site to a local recycling facility to the extent feasible. The project is estimated to result in an average total net increase of approximately 78 truckloads of demolition waste over the 10-day demolition phase of the project, and up to 5-days during the ISS phase of the project.

- Up to 2 truckloads per day of grading and finished surface materials including backfill soil, crushed rock, concrete, and/or pavement materials will be transported to the Site during the grading and restoration phases of the project from a local source using local streets from Highway 101. The project is estimated to result in an average total net increase of approximately 36 truckloads of restoration materials to the Site over the 15-day grading and restoration phase of the project.

- Daily truck trips from the Site will be limited to approximately 30 truckloads.

- Up to 3 delivery trucks/service vehicles per day arriving at the Site with remediation supplies, equipment delivery/maintenance, sample pickup, portable restroom servicing, and other miscellaneous site services throughout the project duration of 90 days (18 weeks).

- Up to 13 temporary, remediation project personnel vehicles per day throughout the project duration of 90 days (18 weeks) may access the Site from local roads in the Site vicinity. Project personnel will stay at local hotels or motels in the City of Salinas and commute a total distance of approximately 10 miles roundtrip to/from the Site during the week. Project personnel will be encouraged to utilize carpooling and/or sustainable means of travel (walking, bicycles) to reduce vehicle trips to the Site daily.

In sum, it is estimated that the project will result in a total maximum worst-case net increase of approximately 23 vehicle trips per day on local streets between the Site and Highway 101. The project is temporary in nature and has an estimated duration of approximately 90 days (18 weeks). Within the 90-day project window, it is anticipated that ISS treatment activities will be completed in a period of 65 days (13 weeks), and the remainder of the time (25 days/ 5 weeks) would involve site preparation/demolition activities, grading and restoration activities, and confirmation soil sampling activities. Therefore, project traffic during the estimated 65-day ISS treatment phase may result in a total maximum worst-case net increase of approximately 23 vehicle trips per day, while the remaining 25 days would result in a total maximum net increase of approximately 17 vehicle trips per day.

Vehicle trips associated with project traffic are not expected to impact the existing level of service on local streets between the Site and Highway 101 since the worst-case net increase in traffic will be on the order of approximately 3 vehicles per hour during the 8 to 10-hour project day (construction hours 7 AM to 5 PM), and all proposed roadways with the exception of a segment of North Main Street currently operate at LOS D or better indicating little to no congestion issues during peak hours. In addition, haul trucks carrying soil export/ import materials will be instructed to access the Site outside peak hours, and therefore will not contribute to the congestion currently experienced on the section of North Main Street during peak hours. Further, project personnel will be in direct contact with haul truck drivers to prevent more than two trucks accessing the Site at any one time so that traffic congestion is not worsened on local streets between the Site and Highway 101. Similar to haul trucks, delivery/service trucks and Portland cement truckloads will be scheduled by project personnel for delivery windows outside peak hours. As a result, project personnel vehicles will comprise the majority of

project-related traffic during peak hours. However, following the completion of the proposed 65-day ISS treatment phase, project traffic associated with workers/personnel vehicles would be reduced from an estimated 13 vehicles per day to an average of approximately 7 vehicles per day, which does not take into account carpooling and use of sustainable travel that will be required for the project. Further, these vehicles will be able to access the Site via alternate routes rather than those proposed for haul trucks to further ensure the project does not contribute to a greater level of congestion. Therefore, the project is not expected to result in a net increase in traffic which is substantial in relation to the existing traffic load and capacity of the current street system and it will therefore have less than a significant impact.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.

Impact Analysis:
Local streets within the Site vicinity that will be used by the project, particularly haul trucks, to access the Site from Highway 101 are currently rated with a LOS D or better based on the 2002 City General Plan. As discussed above, it is estimated that the project will result in a worst-case maximum estimated total of 23 vehicle trips per day required to support the project. However, during the majority of the project outside the ISS treatment phase estimated at 65 days of the 90-day project, it is estimated that the project will result in a total maximum net increase of approximately 17 vehicle trips per day. This should not impact the existing LOS for roadways in the vicinity of the Site. Although it is possible for temporary traffic congestion to occur at any time during the project's duration as a result of project vehicles during peak hours including the morning, lunch hour, and afternoon commute, congestion resulting from project vehicles at these times of the day is unlikely because project vehicles will access the Site at varying times throughout the 8- to 10-hour work day, not just the peak hours. In the event excessive congestion from project vehicles is observed at any time during the project, control measures including alternate project transportation schedules, alternate haul routes in consultation with the city, staged vehicle movements, and similar to relive the congestion will be implemented. Additionally, there will be ongoing coordination and consultation with city traffic engineers to prevent potential congestion. Another mitigation option that may be implemented if congestion is observed would be to alter the proposed haul route during the project in consultation with the city engineer. Further, as a standard and sustainable practice during the project personnel whom will comprise the majority of project traffic during the peak hours will be encouraged to carpool, use sustainable methods of transportation such as bicycles/walking where feasible, or access the Site via alternate routes that are less congested. In addition, if congestion if it becomes a nuisance, personnel will access the site outside peak hours to the extent feasible (i.e. arrive to work 30 minutes earlier, leave the Site 30 minutes later, and/or take an early lunch or late lunch outside the peak lunch window).

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact Analysis:
There are no dangerous traffic conditions at or near the Site. The remediation project will not alter the outside traffic approach to or from the Site. The existing egress and ingress to Highway 101 conforms to the standards established within the Caltrans Highway Design Manual.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

d. Result in inadequate emergency access.

Impact Analysis:
Emergency access to the Site is readily available via the west side of the Site at Bridge Street, the east side of the Site at Bridge alley, and from the south at Market Way. There will be ongoing coordination with the local law enforcement agency and emergency responders. Emergency procedures are discussed in the HASP and site-specific ESCP.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Result in inadequate parking capacity.

Impact Analysis:
All project-related vehicles will be parked onsite throughout the duration of the project. Haul trucks and supply/vendor//delivery trucks will load/unload within the bounds of the Site. ISS activities are proposed for a portion of the 1-acre Site as shown in Attachment B- Figure 4. ISS treatment is not proposed on the northern half of the Site, and it will be capped at the end of the project; therefore, allowing this area of the Site to be available for the staging of temporary construction equipment, transport haul trucks, and worker vehicles during construction activities. Project vehicles will not be parked off-site on adjacent or near-by city streets. Therefore, the project will not result in an inadequate parking capacity, or adversely impact parking for nearby businesses.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Impact Analysis:
There will be no impact to adopted policies, plans, or programs supporting alternative transportation in the area of the Site. There are no bus turnouts, bicycle racks, or other alternative transportation infrastructure at or near the Site, and there are no alternative transportation plans and/or policies identified in the City of Salinas General Plan that will conflict with the proposed project.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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17. Tribal Cultural Resources

Project Activities Likely to Create an Impact:

- Surface disturbing activities followed by ISS treatment.
- Drilling and removal of existing groundwater and soil gas wells.
- Drilling and collection of confirmation soil samples following ISS treatment.
- Drilling and installation of post-remediation groundwater and soil gas wells
- Site restoration activities including grading and paving and/or placement of crushed rock.

Description of Baseline Environmental Conditions:
See Baseline Environmental Conditions description in Section 5 Cultural Resources above.

Far Western Anthropological Research Group, Inc. completed a cultural resources review and survey for the project site in August 2015. The report of this survey is included in Attachment C. The survey included a records search for the project site and a 0.25-mile radius area surrounding the project site, consultation with the NAHC, and a field reconnaissance of the project site. The records search included the review of the NRHP database, California Register of Historical Resources, California inventory of historic resources, California State Historical Landmarks, California State Points of Historical Interest, Office of Historic Preservation's Historical property data file, City of Salinas Historic Register, and consultation with the Native American Heritage Commission. One request from a tribal representative for cultural resources monitors to be present was received during the 2015 cultural resources review and survey. DTSC conducted another round of tribal outreach in January 2018. No new tribal contacts were identified by NAHC, and no responses to letters sent to the tribal contacts during the 2018 outreach were received by DTSC.

Analysis as to whether or not project activities would:

a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)

2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact Analysis:
There are no known tribal cultural resources at the Site as documented in the cultural resources survey report included in Attachment C. The Site is not listed or eligible for listing on the California Register of Historical Resources, or in a local register of historical resources. The Site is not a resource as determined by a lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. Therefore, project activities will not cause an adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074.

Far Western Anthropological Research Group, Inc. received one request from a tribal representative for cultural resource monitors to be present at the Site during ground disturbing activities. The RAP specifies that a certified/qualified monitor will be present at the Site during any ground disturbing activities. The following control measures and BMPs are included in the RAP for the accidental discovery of human remains and potential cultural or archaeological resources during ground disturbing activities, excavation, or disturbance of the Site or any nearby area:

- A certified/qualified monitor will be present at the Site during the excavation phase of ISS, and in the unlikely event that cultural, archaeological or tribal cultural resources are encountered the following will be conducted:

- If archaeological resources are encountered during soil excavation activities, work shall be temporarily halted in the vicinity of the discovered materials and workers will avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided recommendations in accordance with applicable regulations (i.e., National Historic Preservation Act and Native American Graves Protection and Repatriation Act). Project personnel will not collect cultural resources.

- In the event of accidental discovery of human remains during the soil excavation activities, excavation of the area or any nearby area shall stop immediately, and the County Coroner notified to determine its origin. The coroner will determine disposition within 48 hours. If the remains are Native American, the coroner will be responsible for contacting the NAHC within 24 hours. The NAHC will identify and notify the person(s) who might be the most likely descendent (MLD) who will make recommendations for the appropriate and dignified treatment of the remains (Public Resources Code, section 5097.98). The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the Site (CEQA Guidelines, CCR section 15064.5(e); HSC section 7050.5).

- In the event of accidental discovery of potential cultural, tribal cultural, or archaeological resources, excavation activities in the immediate area and surrounding 50 feet will be immediately suspended. DTSC staff, tribal representatives, and the property owner are to be immediately notified and informed. After discussion with their Tribal Chairperson or respective Cultural Resources Managers or Tribal Historic Preservation Officers and in collaboration with DTSC (including the Office of Environmental Justice and Tribal Affairs) and the property owner, any measures deemed necessary to record and/or protect the cultural or archaeological resource(s) will be implemented.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:
1. Letter report, Cultural Resources Review of the Former Salinas Manufactured Gas Plant Site Project, Salinas, Monterey County, California, addressed to Mr. Christophe Descantes, Pacific Gas and Electric Company, from Allika Ruby, Far Western Anthropological Research Group, Inc., August 11, 2015.
2. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.

18. Utilities and Service Systems

Project Activities Likely to Create an Impact:
- Use of municipal water for dust control and mixing of concrete in the batch plant for ISS treatment of deep soil.
- Temporary electrical power
- Excavation

Description of Baseline Environmental Conditions:
The Site is currently vacant and unoccupied with the exception of an unmanned PG&E gas regulator station in the southeast corner. Known underground utilities at the Site based on field surveys, past investigations, and observed utility member markings include: electric, gas, and water. Water to the Site will be provided by the City of Salinas metered municipal water supply system. If any contaminated waste water is generated during the project, it will be captured and contained on-site for proper disposal. No wastewater will be discharged to the existing storm drain or sewer lines in the Site vicinity. Temporary electrical power will be supplied by PG&E or alternatively, a generator may be used. It is noted that groundwater is not planned for extraction from the subsurface during the project. Wastewater generated from project activities may include water from equipment and personnel decontamination, left over cement slurry water from concrete mixing, and/or static water encountered in a subsurface structure that is pumped to the surface into a baker tank and is sampled and ultimately disposed off-site.

Prior to commencing excavation, Underground Service Alert (USA) will be contacted at least 48 hours in advance to identify the location of underground utility lines that enter the Site. All proposed excavation areas will be clearly marked with white paint or surveyors flagging as required. Utility members responding to the USA ticket will clearly mark the positions of their utility lines on the ground surface throughout the designated excavation area. All utility owners of record within the Site vicinity will be contacted prior to remediation.

Analysis as to whether or not project activities would:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Impact Analysis:
Wastewater will not be treated on-site. During construction, any wastewater that is generated will be properly containerized in DOT-approved 55-gallon steel drums with sealed locking lids by pumping the wastewater from the subsurface, and/or transferring the wastewater from the collection device (i.e., 5-gallon bucket, vacuum truck, baker tank) into the drum. The drum(s) will be labeled, sampled, profiled, and transported to an approved off-site treatment facility.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Impact Analysis:
The project will not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Impact Analysis:
The project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

Impact Analysis:
An average water usage based on similar remediation sites where excavation was used as the remedial action resulted in the consumption of approximately 3,000 to 5,000 gallons of water per day for dust suppression and equipment decontamination, and moisture conditioning of backfill. For this project, a smaller volume of water will be required as moisture conditioning of backfill is not an element of the project. Water to support the project will be obtained from the City of Salinas water distribution system. The City of Salinas is served by two private water companies: Alco Water Service and California Water Service, whom provide high-quality ground water from deep wells. Further, the City of Salinas and the City's Pure Water Monterey partners propose to recycle urban storm water runoff for use as irrigation and drinking water according to the City's Public Works Department, Water, Waste, and Energy Division, Stormwater/Water recycling Program accessed on February 13, 2018 at: https://www.cityofsalinas.org/our-city-services/public-works/water-waste-energy/stormwaterwater-recycling/regulations-stormwater. Depending on the quality and availability of the recycled water, this may be another water source option for use for the proposed project for dust suppression and decontamination needs. Therefore, because City water supply is not in shortage, and with the potential availability of recycled water for project use, the project is not expected to have a significant impact on existing water supplies.

Conclusion:
☐ Potentially Significant Impact

☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

e. Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments.

Impact Analysis:
The project will not produce additional wastewater that would result in the need for increased capacity from existing wastewater treatment facilities. Small amounts of wastewater that may be generated from equipment and personnel decontamination, left over cement slurry water from concrete mixing, and/or static water encountered in a subsurface structure will be containerized and transported off-site to an approved disposal facility. Based on wastewater generation at similar remediation projects, wastewater is typically disposed at an average rate of 10 55-gallon drums per month. Wastewater from sanitary sources (i.e. portable toilets) will be routinely collected by a local company (i.e. portable toilet supplier) and disposed off-site. This activity will not impede the providers existing commitments.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs.

Impact Analysis:
Waste associated with the project including: (1) 1,043 CY (1,564 tons) of demolition waste from the removal of existing pavement, concrete, and wells, and, (2) 4,308 CY (6,462 tons) of impacted soil from swell that is unearthed from the subsurface during ISS treatment will be taken to a licensed off-site disposal facility(ies) with sufficient permitted capacity to accept the waste. The facility(ies) have not been selected because it will depend upon the excavated COC impacted soils' waste profiling results. A list of potential disposal facilities is presented in Appendix D of the RAP.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

g. Comply with federal, state, and local statutes and regulations related to solid waste.

Impact Analysis:
The remediation project will comply with all local, state, and federal requirements for integrated waste management (e.g., recycling) and solid waste disposal. All waste associated with the project will be taken to a licensed off-site facility(ies). Refer to Sections 17(a), (b), (e), and (f).

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:
1. PG&E Salinas Manufactured Gas Plant Site Survey, topographic survey of project site, drawing number Z-1054, dated July 25, 2012 and last updated October 8, 2012. Available at TPG and PG&E offices.
2. 2016 Water Quality Report Salinas District, Salinas accessed on February 13, 2018 at: https://www.calwater.com/waterquality/water-quality-reports/sln/
3. Terra Pacific Group, 2017, Draft Remedial Action Plan, Former Salinas Manufactured Gas Plant Site, 2 Bridge Street, Salinas, California: December 15, 2017.

Mandatory Findings of Significance

Based on evidence provided in this Initial Study, DTSC makes the following findings:

a. The project ☐ has ☒ does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

b. The project ☐ has ☒ does not have impacts that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

c. The project ☐ has ☒ does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

Determination of Appropriate Environmental Document:

Based on evidence provided in this Initial Study, DTSC makes the following determination:

☒ The proposed project COULD NOT HAVE a significant effect on the environment. A **Negative Declaration** will be prepared.

☐ The proposed project COULD HAVE a significant effect on the environment. However, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **Mitigated Negative Declaration** will be prepared.

☐ The proposed project MAY HAVE a significant effect on the environment. An **Environmental Impact Report** is required.

☐ The proposed project MAY HAVE a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **Environmental Impact Report** is required, but it must analyze only the effects that remain to be addressed.

☐ The proposed project COULD HAVE a significant effect on the environment. However, all potentially significant effects (a) have been analyzed adequately in an earlier Environmental Impact Report or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier Environmental Impact Report or Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed project. Therefore, nothing further is required.

Certification:

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this initial study evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

Preparer's Signature	Date
	6/25/19

Preparer's Name	Preparer's Title	Phone #
Sagar Bhatt	Environmental Scientist	(510) 540-3844

Branch or Unit Chief Signature	Date
	June 25, 2019

Branch or Unit Chief Name	Branch or Unit Chief Title	Phone #
Julie Pettijohn	Environmental Program Manager I	(510) 540-3843

ATTACHEMENT A

REFERENCE LIST

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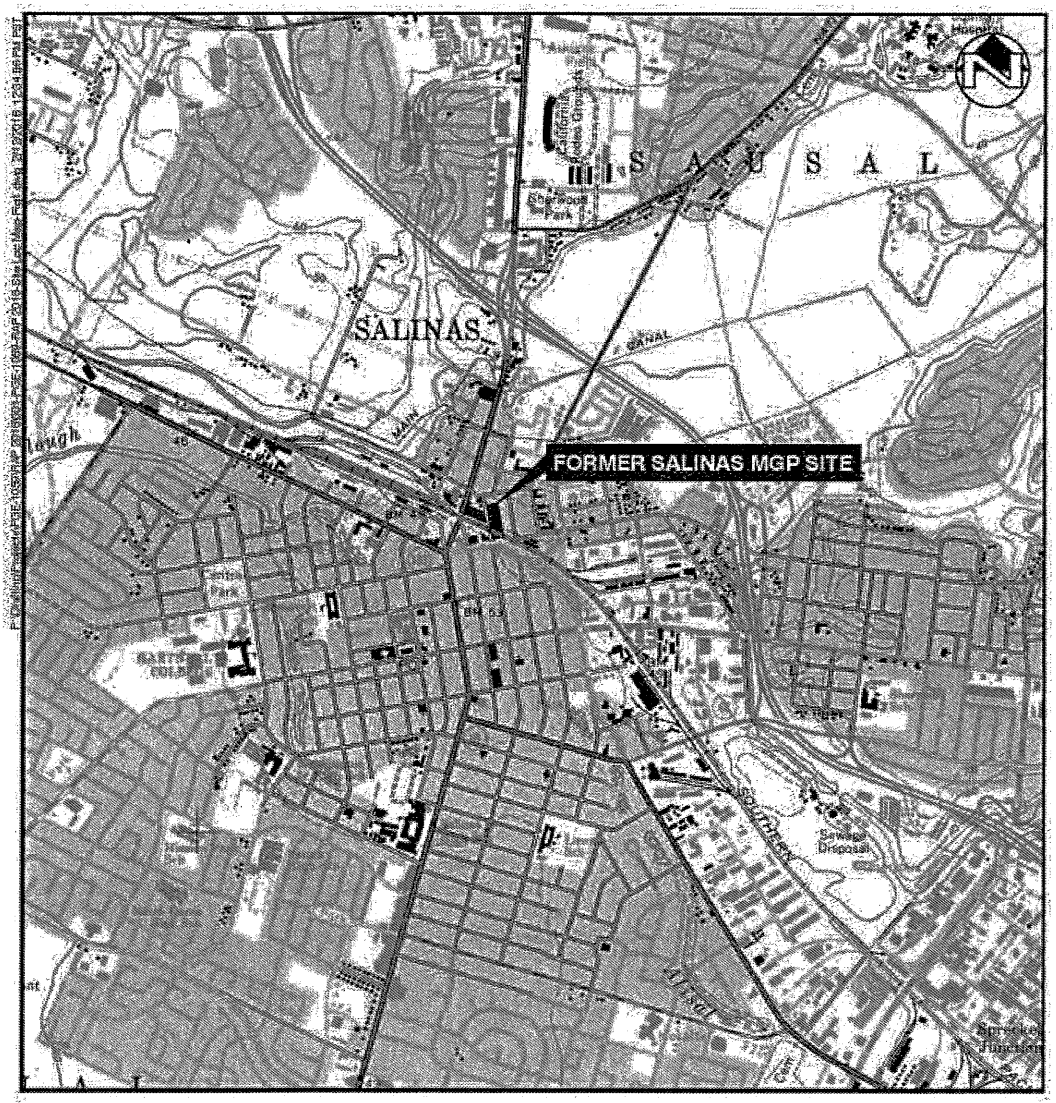
ATTACHEMENT B

FIGURES

List of Figures


SALINAS
FORMER SALINAS MGP SITE
0
2,000
4,000 FEET
APPROXIMATE SCALE
FIGURE 1
SITE LOCATION MAP
FORMER SALINAS MGP
SALINAS, CALIFORNIA
TERRA PACIFIC GROUP
Environmental Engineering, Consulting, and Construction
REFERENCE:
7.5 MINUTE U.S.G.S. TOPOGRAPHIC MAP OF
SALINAS, CALIFORNIA
DATED: 1947
PHOTOREVISED: 1984

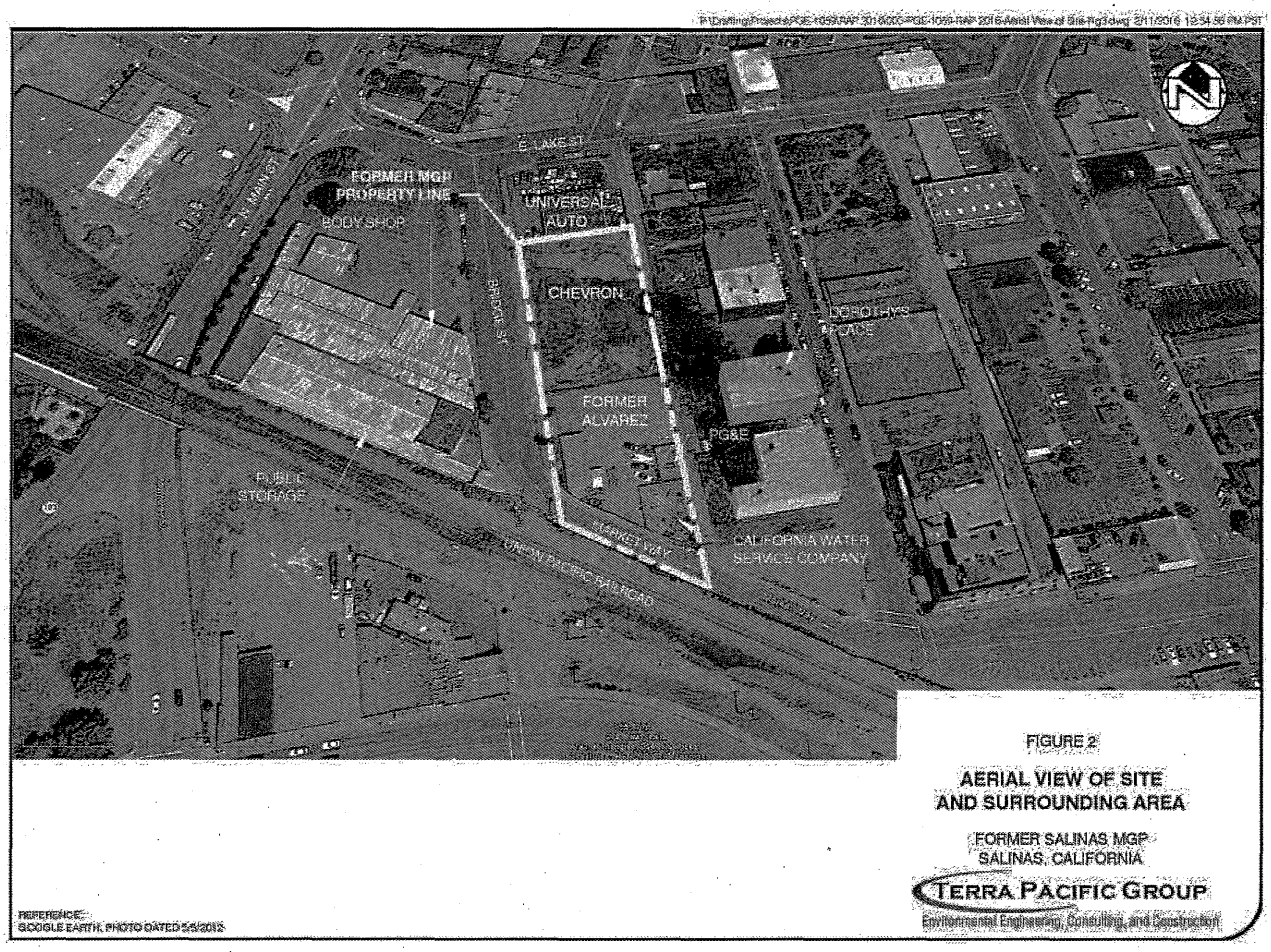
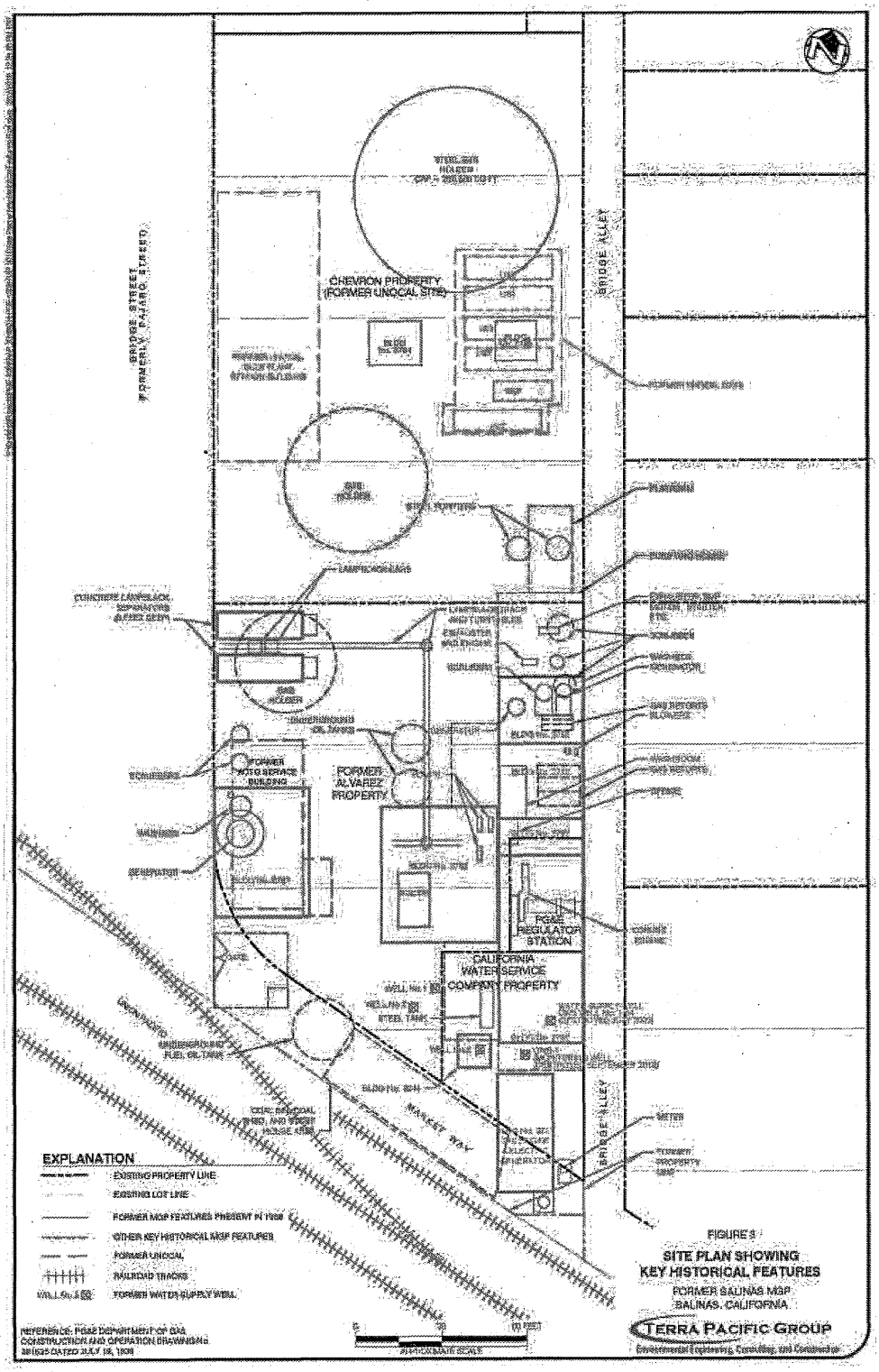


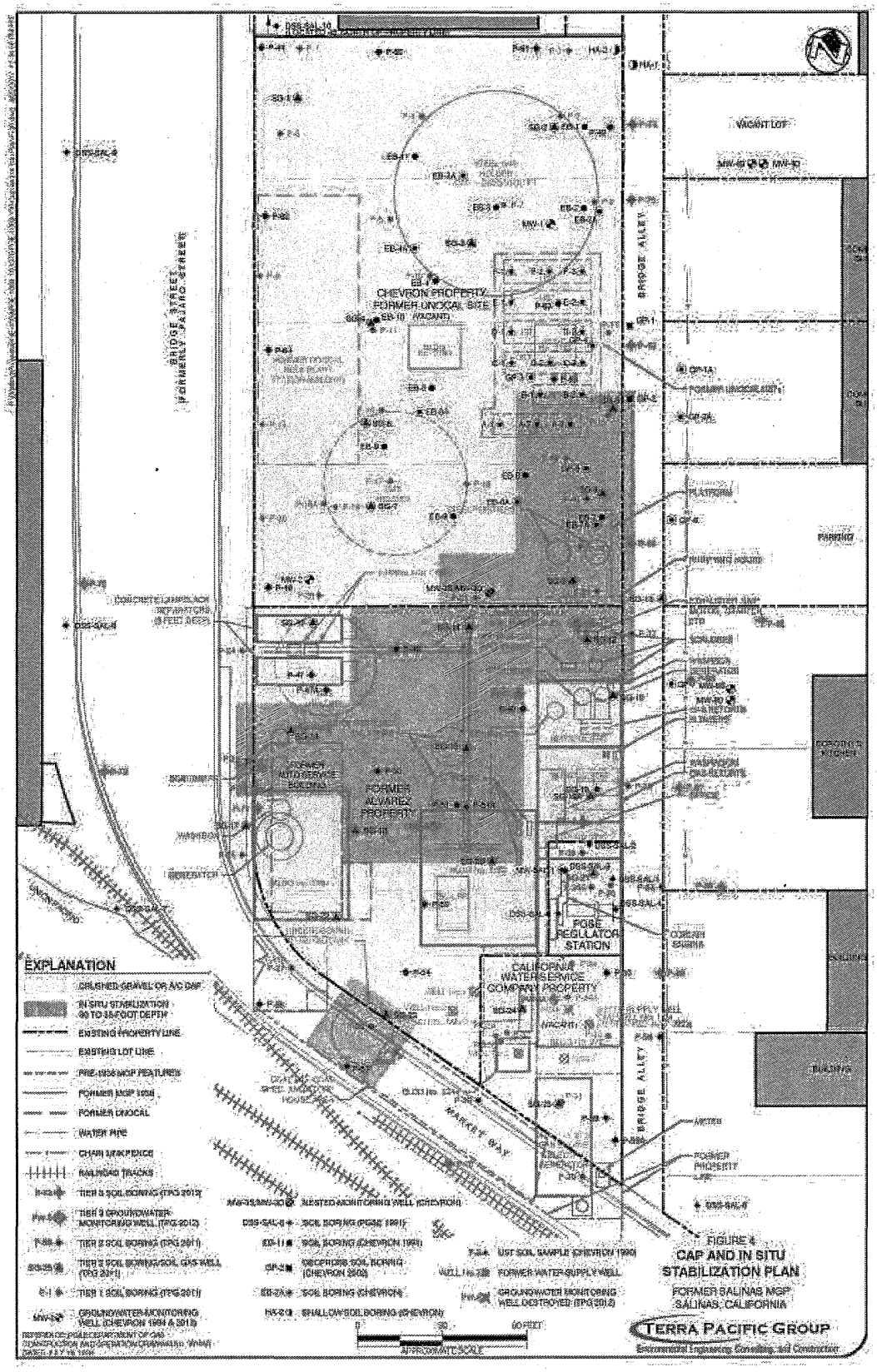
FIGURE 2

AERIAL VIEW OF SITE AND SURROUNDING AREA

FORMER SALINAS MGP
SALINAS, CALIFORNIA

TERRA PACIFIC GROUP
Environmental Engineering, Consulting, and Construction


BRIDGE STREET
(FORMERLY MAIN ST.)
CHEVRON PROPERTY
(FORMER UNOCAL SITE)
BRIDGE ALLEY
FORMER
ALVAREZ
PROPERTY
PG&E
REGULATOR
STATION
CALIFORNIA
WATER SERVICE
COMPANY PROPERTY
EXPLANATION
EXISTING PROPERTY LINE
EXISTING LOT LINE
FORMER MGP FEATURES PRESENT IN 1908
OTHER KEY HISTORICAL MGP FEATURES
FORMER UNOCAL
RAILROAD TRACKS
FORMER WATER SUPPLY WELL
FIGURE 3
SITE PLAN SHOWING
KEY HISTORICAL FEATURES
FORMER SALINAS MGP
SALINAS, CALIFORNIA
TERRA PACIFIC GROUP


CHEVRON PROPERTY
FORMER UNOCAL SITE
FORMER ALVAREZ PROPERTY
CALIFORNIA WATER SERVICE COMPANY PROPERTY
PG&E REGULATOR STATION
VACANT LOT
PARKING
BUILDING
BRIDGE ALLEY
BRIDGE STREET
MARKET WAY
EXPLANATION
FIGURE 4
CAP AND IN SITU STABILIZATION PLAN
FORMER SALINAS MSP
SALINAS, CALIFORNIA
TERRA PACIFIC GROUP
Environmental Engineering, Consulting, and Construction

ATTACHMENT C

Cultural Resources Report for Site

Attachment D

Air Quality Standards and Project Emission Estimation

- **Federal and State Ambient Air Quality Standards**

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[10]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[10]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (10/1/15)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

- **Project Air Emissions Estimation**

Pollutant emissions from the proposed project were estimated for on-site (off-road) heavy construction equipment planned for use during each phase of the project, mobile/on-road vehicle emissions for all vehicles expected to access the Site during the project, and for anticipated dust generating activities including grading, bulldozing, truck loading, and truck unloading. The California Emission Estimator Model (CalEEMod) version 2016 was used to estimate project pollutant emissions for all emission generating activities. The CalEEMod air emission model was developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with the California Air Districts and is approved for use in estimating project air emissions as part of CEQA. Where site-specific data was known, it was input into CalEEMod; otherwise the built-in default data was used. A summary of the project schedule and phasing break-down used in the CalEEMod air emission analysis is shown below:

Phase Number	Phase Name	Phase Type	Phase Start Date	Phase End Date	Num Days Week	Num Days
1	Site Preparation	Site Preparation	2019/08/05	2019/08/16	5	10
2	Demolition	Demolition	2019/08/12	2019/08/23	5	10
3	ISS Treatment	Grading	2019/08/19	2019/11/15	5	65
4	Grading	Grading	2019/11/18	2019/11/29	5	10
5	Restoration	Paving	2019/11/18	2019/11/29	5	10
6	Building Construction	Building Construction	2019/12/14	2019/12/13	5	0
7	Architectural Coating	Architectural Coating	2019/12/28	2019/12/27	5	0

Off-road heavy construction equipment was selected for each phase of the project. A summary of the construction equipment included in the air emission analysis is provided below.

Phase Name	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Usage Hours
Site Preparation	Graders	1	8
Site Preparation	Off-Highway Trucks	1	8
Site Preparation	Rubber Tired Dozers	1	7
Site Preparation	Sweepers/Scrubbers	1	4
Site Preparation	Tractors/Loaders/Backhoes	1	8
Demolition	Bore/Drill Rigs	1	8
Demolition	Concrete/Industrial Saws	2	8
Demolition	Generator Sets	1	8
Demolition	Off-Highway Trucks	1	8
Demolition	Rubber Tired Dozers	1	8
Demolition	Sweepers/Scrubbers	1	4
Demolition	Tractors/Loaders/Backhoes	3	8
ISS Treatment	Bore/Drill Rigs	1	8
ISS Treatment	Cement and Mortar Mixers	1	8
ISS Treatment	Excavators	1	8
ISS Treatment	Graders	0	6
ISS Treatment	Off-Highway Trucks	1	8
ISS Treatment	Other Construction Equipment	1	8
ISS Treatment	Rough Terrain Forklifts	1	8
ISS Treatment	Rubber Tired Dozers	1	6
ISS Treatment	Rubber Tired Loaders	0	0
ISS Treatment	Sweepers/Scrubbers	1	4
ISS Treatment	Tractors/Loaders/Backhoes	2	8
Grading	Generator Sets	1	8
Grading	Graders	1	8
Grading	Off-Highway Trucks	1	8

Phase Name	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Usage Hours
Grading	Rollers	1	6
Grading	Rubber Tired Dozers	1	8
Grading	Rubber Tired Loaders	1	6
Grading	Sweepers/Scrubbers	1	4
Grading	Tractors/Loaders/Backhoes	2	7
Restoration	Bore/Drill Rigs	1	6
Restoration	Cement and Mortar Mixers	1	6
Restoration	Off-Highway Trucks	1	8
Restoration	Pavers	1	6
Restoration	Paving Equipment	1	8
Restoration	Rollers	1	7
Restoration	Rubber Tired Dozers	1	6
Restoration	Tractors/Loaders/Backhoes	1	8

Default values were used for vehicle trips and length (distance) with the exception of the haul distance for impacted soil. For impacted soil haul trucks, it was assumed each truck would travel a distance of 180 miles, which corrresponds to the haul distance from the Site to the Buttonwillow facility. Also, it was assumed in the air emisison analysis that three haul trucks (6 trips) of vendor/supply vehicles would access the Site daily during each phase of the project instead of the model default value of 0 trucks/trips.

Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	10	6	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT
Demolition	23	6	155	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT
ISS Treatment	25	6	835	10.8	180	20	LD_Mix	HDT_Mix	HHDT
Grading	23	6	72	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT
Restoration	20	6	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT

A summary of the material quantities included in the air emission analysis are shown in the following tables. The material imported volume for the ISS treatment phase is the estimated volume of Portland cement assuming 8% Portland cement per cubic yard of treated soil volume. The material exported volume is the estimated volume of ISS soil swell that will be unearthed during the project. The material imported volume for the grading phase accounts for the potential placement of 4-inches of crushed rock over the entire 1-acre site. The demolition volume is the estimated volume of pavement, concrete building foundation, and subsurface concrete remnants that will be removed during the work to allow for ISS treatment. All other values in the below tables are the CalEEMod default values.

Phase Name	Material Imported	Material Exported	Grading Size Metric	Import Export Phased	Mean Vehicle Speed	Acres Of Grading	Material Moisture Content Bulldozing	Material Moisture Content Truck Loading	Material Silt Content
Site Preparation	0	0		0	7.1	2.5	7.9	12	6.9
ISS Treatment	1982	6462	Ton of Debris	0	7.1	0	7.9	12	6.9
Grading	538	0	Cubic Yards	0	7.1	2.5	7.9	12	6.9

Phase Name	Demolition Size Metric	Demolition Unit Amount
Demolition	Ton of Debris	1564

Control measures were not included in the air emission analysis using CalEEMod therefore allowing the estimation of worst-case project pollutant emissions. Following set-up and input of site-specific data into CalEEMod, the model was run, and output emission reports were generated using the default summer emission rates, winter emission rates, and annual emission rates. These CalEEMod output reports are included at the end of this attachment. The results of the air emission analysis for the modeled pollutants are summarized in the following tables, which are included as Tables 3 and 4 of the CEQA IS.

Estimated Project Emissions from
Construction Equipment Exhaust, Construction Activities, and Mobile Sources

Pollutant	CalEEMod Results [1]			MBUAPCD Threshold [2] (lbs/day)
	Total Project Daily Emissions-Summer ERs (lbs/day)	Total Project Daily Emissions-Winter ERs (lbs/day)	Total Project Emissions-Annual ERs (tons/year **)	
ROG	**8.8205**	**8.8600**	0.2070	**137**
NOx	**98.3569**	**99.1306**	2.4026	**137**
CO	**60.7334**	**60.9009**	1.3861	**550**
SO2	0.1751	0.1743	4.2300 E-003	NA
Total CO2	17,595.0883	17,506.5854	387.6017**	NA
CH4	3.2291	3.2386	0.0744**	NA
N2O	0.0000	0.0000	0.0000	NA
CO2e	17,675.8146	17,587.5495	389.4615**	NA

Notes:

1. CalEEMod version 2016 air modeling program used with project total duration estimated at 18 weeks (90 days).

2. MBUAPCD Air District Guidelines for Implementing CEQA, dated February 2016, accessed at: http://mbard.org/wp-content/uploads/2016/03/Attachment_Guidelines-for-Implementing-CEQA.pdf

** Annual emissions of Total CO2, CH4, and CO2e in units of metric tons (MT) per year (MT/year)

NA = not applicable; threshold has not been established for pollutant

ERs = emission rates

lbs/day = pounds per day

Estimated Project Emissions of PM10 and PM2.5 from Construction Equipment Exhaust, Construction Activities, and Mobile Sources

Pollutant	CalEEMod Results [1]			MBUAPCD Threshold [2] (lbs/day)
	Total Project Daily Emissions-Summer ERs (lbs/day)	Total Project Daily Emissions-Winter ERs (lbs/day)	Total Project Emissions-Annual ERs (tons/year)	
PM10 total	14.0254	14.0267	0.3420	82
PM2.5 total	7.4259	7.4272	0.2023	55

Notes:

1. CalEEMod version 2016 air modeling program used with project total duration estimated at 18 weeks (90 days).
2. MBUAPCD Air District Guidelines for Implementing CEQA, dated February 2016, accessed at: http://mbard.org/wp-content/uploads/2016/03/Attachment_Guidelines-for-Implementing-CEQA.pdf

ERs = emission rates

PM10 total and PM2.5 total includes fugitive PM and Exhaust PM emissions

lbs/day = pounds per day

- **Greenhouse Gas Emission Estimation**

Total daily Greenhouse Gas (GHG) emissions were calculated using the EPA GHG Equivalencies Calculator for carbon dioxide equivalents (CO2e), NOx, CO2 and CH4 emissions. The EPA GHG Equivalencies Calculator was accessed at: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

The daily maximum project emissions estimated in units of pounds per day for the GHG components by CalEEMod were input into the EPA GHG Equivalency calculator to estimate the daily GHG emissions for the project. The worst-case maximum GHG component emission (i.e. maximum estimated emission from summer and winter CalEEMod runs) was used to estimate the daily project GHG emissions. To estimate the total (annual) GHG emissions associated with the proposed project, the CalEEMod output emission results for the annual emission rate run for the GHG components was input into the EPA GHG Equivalencies Calculator. Screenshots of the emission data input and resulting GHG emission estimation result from the EPA GHG Equivalency calculator are shown below.

Snapshot of Daily GHG Emission Estimate

Print Your Results

If You Have Energy Data | If You Have Emissions Data

Amount	Unit	Gas
17675.8146	Pounds	CO_2 - Carbon Dioxide or CO_2 Equivalent*
60.9009	Pounds	Carbon or Carbon Equivalent
3.2386	Pounds	CH_4 - Methane
99.1306	Pounds	N_2O - Nitrous Oxide
	Metric Tons	HCFC-22 - Hydrofluorocarbon gases
	Metric Tons	CF4 - Perfluorocarbon gases
	Metric Tons	SF_6 - Sulfur Hexafluoride

Calculate

*If your estimated emissions of methane, nitrous oxide, or other non-CO_2 gases are already expressed in CO_2 equivalent or carbon equivalent, please enter your figures in the row for CO_2 or carbon equivalent.

Equivalency Results How are they calculated?

The sum of the greenhouse gas emissions you entered above is of Carbon Dioxide Equivalent. This is equivalent to: 21.6 Metric Tons

Snapshot of Total (annual) GHG Emission Estimate

Print Your Results

If You Have Energy Data | If You Have Emissions Data

Amount	Unit	Gas
389.4615	Metric Tons	CO_2 - Carbon Dioxide or CO_2 Equivalent*
1.3861	Tons	Carbon or Carbon Equivalent
0.0744	Metric Tons	CH_4 - Methane
2.4026	Tons	N_2O - Nitrous Oxide
	Metric Tons	HCFC-22 - Hydrofluorocarbon gases
	Metric Tons	CF4 - Perfluorocarbon gases
	Metric Tons	SF_6 - Sulfur Hexafluoride

Calculate

*If your estimated emissions of methane, nitrous oxide, or other non-CO_2 gases are already expressed in CO_2 equivalent or carbon equivalent, please enter your figures in the row for CO_2 or carbon equivalent.

Equivalency Results How are they calculated?

The sum of the greenhouse gas emissions you entered above is of Carbon Dioxide Equivalent. This is equivalent to: 1,045 Metric Tons